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# The Former Philippines thra Foreign Eyes Edited by Austin Craig 

Feodor Jagor's Travels in the Philippines
(The out-of-print 1875 English translation corrected from the original German text)

The State of the Philippines in 1810
by Tomas de Comyn
(William Walton's 1821 translation modernizea') •
Manila and Sulu in 1842
by Com. Chas. Wilkes, U.S.N.
(Narrative of U. S. Exploring Expedition 1838-42, Vol. 5)
Manila in 1819
by Lieut. John White, U. S. N.
(From the "History of a Voyage to the China Sea")
The Peopling of the Philippines by Doctor Rudolf Virchow
(O. T. Mason's translation; Smithsonian Institution 1899 Report)

People and Prospects of the Philippines by an English Merchant, 1778, and a Consul, 1878
(From Blackwood's and the Cornhill Magazine)
Filipino Merchants of the early 1890s by F. Karuth, F.R.G.S.

[^0]J. A. LeRoy, The Americans in the Philippines, Boston, 1914, Vol. I, p. 32:"Of the French, English, and German travelers, scientists, business men, and soldiers, who have given us an insight into the conditions in the islands from 1775 to 1860, Jagor, the last of the list, was the keenest observer and has left THE MOST VALUABLE BOOK. He it was who clearly foresaw the inevitable loss of the Philippines to Spain and, with prophetic insight into the expansion of the Pacific commerce of the United States, predicted almost in so many words the occupation of the Philippines by the United States."
T. H. Pardo de Tavera, "Biblioteca Filipina," 1903.-Jagor made his travels in the Philippines during the years 1859 and 1860. Much of the statistical data, of custom houses, general government, etc., was supplied him from the ministry for over-seas possessions in Madrid. *** The author was a Prussian savant who resided in Berlin and enjoyed an enviable fame in the scientific world of Europe and in India.

Blair and Robertson, The Philippine Islands 1493-1898, Vol. LII, p. 122.The first essential to a study of this (modern) period is a fair and comprehensive survey of Philippine conditions in the years just preceding of the "old régime," as we may call it, though it was then breaking down in certain particulars. One book alone will serv the studergt's'purpose in this respect; and, whatever others are read, JAGOR'S IS DISFEMSAKE
: $\because \cdot$
Griffin, A List of Books on the Philippine Islands in the Library of Congr Washington, 1903, pp. XVII-XVIII. -"One of the most valuable descriptive accour of the islands is that by Jagor, 'Reisen in den Philippinen,' Berlin, 1873. *** T author made scientific investigations and gives accurate accounts of the natural featur and the people of the islands as he saw them in 1859-60." Also on p. 17, under "Jago Feodor, Reisen in den Philippinen": "This work possesses great scientific value. It is the work of a keen scientific investigator and in some respects HAS NEVER BEEN SUPERSEDED."

Sebastian Vidal y Soler, Madrid, 1875 (Translation).-"The work of Jagor, which has been put into Spanish, is the most recent of the travels in the Archipelago and EXCELS ALL ITS PREDECESSORS in exactness and scientific precision. The observations on the country, its customs, and its social life, are, for the most part, excellent, and the classification of natural history specimens, entrusted to skilled German professors, are in accordance with the latest advancement of science."
T. H. Pardo de Tavera, "Biblioteca Filipina," 1903 (Translation).-."This important work treats principally of Philippine industry, agriculture and commerce in 1810. It seems that it produced a bad impression in Manila because the businessmen of that day who were accustomed to the routine of their procedures were shocked that Don Tomás de Comyn should be permitted to find not good what they thought excellent. *** The author remained eight years in Manila, as general agent of the 'Compañía de Filipinas' and this fact together with his thorongh understanding of finance, economics and commerce combines to make his book of real importance."

Jose Felipe Del Pan, in Preface to Manila Fdition of 1877 (Translation)."Great irritation was produced in this capital (Manila) from 1821 to 1826 by the appearance of Tomás de Comyn's book which disclosed the weak and artificial mechanism of the material interests that should have been the firm support of the moral. Moreover, a few years later, events came to justify the author's farsighted and severe criticisms upon the administration and the commerce of the Philippines."
W. E. Retana, Martinez de Zuñiga, 1893, Vol. II, p. 175 (Translation). "The Comyn is a book of extraordinary merit; it is impossible to say more in so few words."
J. A. LeRoy, The Americans in the Philippines, Boston, 1914, Vol. I, p. 47."Tomas de Comyn, Estado de las Islas Filipinas en 1810, Madrid, 1820, another of the few really invaluable Philippine works."

Made in Manila-Press of E. C. McCullough \& Co.-The Work of Filipinos

## PREFACE

Among the many wrongs done the Filipinos by Spaniards, to be charged against their undeniably large debt to Spain, one of the greatest, if not the most frequently mentioned, was taking from them their good name.

Spanish writers have never been noted for modesty or historical accuracy. Back in 1.589 the printer of the English translation of Padre Juan Gonzalez de Mendoza's "History of the Great and Mighty Kingdom of China" felt it necessary to prefix this warning:

*     *         * the Spaniards (following their ambitious affections) do usually in all their writings extoll their owne actions, even to the setting forth of many untruthes and incredible things, as in their descriptions of the conquistes of the east and west Indies, etc., doth more at large appeare.

Of early Spanish historians Doctor Antonio de Morga seems the single exception, and perhaps even some of his credit comes by contrast, but in later years the rule apparently has proved invariable. As the conditions in the successive periods of Spanish influence were recognized to be indicative of little progress, if not actually retrogressive, the practice grew up of correspondingly lowering the current estimates of the capacity of the Filipinos of the conquest, so that always an apparent advance appeared. This in the closing period, in order to fabricate a sufficient showing for over three centuries of pretended progress, led to the practical denial of human attributes to the Filipinos found here by Legaspi.

Against this denial to his countrymen of virtues as well as rights, Doctor Rizal opposed two briefs whose English titles are "The Philippines A Century Hence" and "The Indolence of the Filipino." Almost every page therein shows the influence of the young student's early reading of the hereinafter-printed studies by the German scientist Jagor, friend and counsellor in his maturer years, and the liberal Spaniard Comyn. Even his acquaintance with Morga, which eventually led to Rizal's republication of the 1609 history long lost to Spaniards, probably was owing to Jagor, although the life-long resolution for that action can be traced to hearing of Sir John Bowring's visit to his uncle's home and the proposed Hakluyt Society English translation then mentioned.

The present value and interest of these now rare books has suggested their republication, to make available to Filipino stutents a course of study which their national hero found profitable as well as to correct the myriad misconceptions of things Philippine in the minds of those who have taken the accepted Spanish accounts as gospel truths.

Dr. L. V. Schweibs, of Berlin, made the hundreds of corrections, many reversing the meanings of former readings, which almost justify calling the revised Jagor translation a new one. Numerous hitherto-untranslated passages likewise appear. There have been left out the illustrations, from crude drawings obsolete since photographic pictures have familiarized the scenes and ohjects, and also the consequently superfluous references to these. No other omission has been allowed, for if one author leaned far to one side in certain debatable questions the other has been equally partisan for the opposite side, except a comment on religion in general and discussion of the world-wide social evil were eliminated as having no particular Philippine bearing to excuse their appearance in a popular work.

The early American quotations of course are for comparison with the numerous American comments of today, and the two magazine extracts give English accounts a century apart. Virchow's matured views have been substituted for the pioneer opinions he furnished Professor Jagor thirty years earlier, and if Rizal's patron in the scientific world fails at times in his facts his method for research is a safe guide.

Finally, three points should constan tlybe borne in mind: (1) allowance must be made for the lessening Spanish influence, surely more foreign to this seafaring people than the present modified Anglo-Saxon education, and so more artificial, i. e., less assimilable, as well as for the removal of the unfavorable environment, before attempting to form an opinion of the present-day Filipino from his prototype pictured in these pages; (2) foreign observers are apt to emphasize what is strange to them in describing olher lands than their own and to leave unnoted points of resemblance which may be much more numerous; (3) Rizal's judgment that his countrymen were more like backward Europeans than Orientals was based on scientific studies of Europe's rural districts and Philippine provincial conditions as well as of oriental country life, so that it is entitled to more weight than the commoner opinion to the contrary which though more popular has been less carefully formed.

University of the Philippines,
Manila, March 11 th, 1916.

## INDEX

Abacá (Manila Hemp)—Abacá, 293; Manila hemp, 293; abacá districts, 294; Undetermined plant relations, 294; Peculiar to the Philippines, 295; Superiority of fiber, 295; Banana varieties, 296; Cultivation, 296; Cutting, 297; Prejudice against cutting after blossoming. 297; Differences with abacá, 297; Extracting the fiber, 298; Lupis and bandala, 300; Grades of lupis, 300; Lupis fabrics, 300; Profit, 300; A Pre-Spanish product, 301; Bandala fabrics, 301; Abacá production and prospects, 304; Export of "Manila hemp," 305; Large local consumption, 305; Sisal-hemp, 305; Varieties of sisal, 306; Profit, 307; Banana substitute unsatisfactory, 307; Manila hemp, 469; Abacá, 274.

Agriculture-Fertile fields, 42; Java-like rice fields, 73; A famous plantation, 65; Sweet potatoes, 141; A French planter, 185; Isolation of fertile regions, 188; A populous fertile district, 194; The people and their crops, 199; Rotation of crops, 199; Locusts, 260; Plan for their extermination, 261; Lack of capital for large plantations, 291; Increasing culture, 361; Estates, 370; Locusts, 471.

Americans-Mongolian vs. Caucasian in America, 336; Chinese problem in America, 337; China and America, 354; Growing American influence, 354; The mission of America, 355; Superiority over Spanish system, 356; American hemp ships, 459; Advantages of Sulu (American) treaty, 528.

Amusements-Visitors to festival, 74; A Filipino theater, 99; An indifferent performance, 99; Interest in festival, 100; A danceless ball, 165; Amusements, 282.

Animals-The carabao, 42; Cattle and horses, 141; Black cattle, 142; Sheep, 142; Swine, 143; Cattle, 187; The flying monkey, 229; A promise of rare animals and wild people, 230; East Indian monkeys, 238; Snaring swine, 269; Scarcity of stock, 275; Swine, 276; Sheep and goats, 276; Draft animals, 466.

Bamboo-Bamboo, 43; Strength, 43; Convenience, 43; Usefulness, 44; Bamboo, raft ferry, 74.

Bisayas-Bisayas, 54; Superstitions regarding the " Bisayan"' bean, 255; Leyte , 259; The Bisayans, 271; Leyte, 281; Cebu, 287; Cebu island, 287; Iloilo, 289; Panay, 495; (see Samar).
Cacao (Chocolate)-Cacao, 89; High quality, 90; Scanty production, 90; Culture, 91; Neglect, 91; Damage by storms, 91; Diseases and pests, 92; Chocolate, 93; An uncertain venture, 94; Use in Europe, 94; Cocoa, 365.

Chinese-Spanish coins in circulation on China coast, 22; Similarity with Chinese conditions, 118; Chinese monopolize trade, 145; Anti-Chinese feeling, 303; Importance of Chinese, 329; Early Chinese Associations, 329 ; Industrial and commercial activity, 330; Unsuccessfulattempts at restriction, 330 ; Early massacre of Chinese, 331; Chinese laborers limited, 331; Limahong and the Mandarins' visit, 331; Another massacre, 332; The pirate

## Index-(Continued)

Kog-seng, 332; Another expulsion, 332; Thrifty traders, 333; Anda's and 1819 massacres, 333; Oppressive taxation, 334; Expulsion of merchants from Manila, 334; Excellent element in population, 335; Formidable competitors, 335; Sphere of future influence, 335; Efficiency and reliability of Chinese labor, 336; Chinese cleverness and industry, 337; Chinese tax, 416.

Climate (See also Earthquakes)-The monsoons, 49; Winds, 51; Storms, 52; Sunshine and rain, 52; Storm-bound shipping, 78; Change of season, 102; Storm damage, 104; Storms, 179; Winds and planting season, 207; A muddy dry season, 211; Seasons and weather, 218; Winds and storms, 219. Typhoons, 460.

Cock-Fighting-Cock-fighting, 26; Probably Malay custom, 27; The cockpit, 27; Its bad influence, 27; Game cocks a Spanish innovation, 200, Provincial cockpit revenue, 411; Cockpit licenses, 411; Cock-fighting, 478.

Coffee-Coffee, 95; Highest grades, 96; Exports, 96; French preference, 96; Prices, 97 ; Javan and Ceylon crops, 97 ; Philippine exports, 97 ; Coffee, 365; Coffee, 470.

Commerce-Future in American and Australian trade, 2; Philippine Islands commercially in the New World, 3 ; Slight share in world commerce, 5 ; Little commerce with Spain, 5 ; Former Spanish ships mainly carried foreign goods, 5; Customhouse red tape, 9; Antiquated restrictions on trade, 10; Laws drove away trade, 11; Exports taxes, 11; Discouragements for foreign ships, 11; Pre-Spanish foreign commerce, 12; The 1869 reform, 12; Bettered conditions, 12; Early extension under Spain, 13; Jealousy of Seville monopolists, 13; Prohibition of China trading, 14; Higher limit on suspension of galleon voyages, 14; The "Philippine Company" monopoly, 15; Subterfuges of European traders, 15; Losses by bad management, 16; Daraga market, 102; Tagalog women traders, 177; Trade, 200; Illogical business, 258; Disproportionate prices, 258; Uncertain trading, 259; No markets, 279; Barter, 279; Exports, 286; Ports of entry, 286; Customhouse data, 288; Unbusinesslike early methods, 302; Change to a safer basis, 303; Money juggling, 325; Neglected market, 363; Ship building advantages, 367; Internal commerce handicapped, 377; Scanty exports, 377; Local markets, 378; External commerce, 379; Business irregularities, 380; Merchants discouraged, 381 ; Capital employed in commerce, 382; Large sums hoarded, 383; Mercantile shi pping, 385; Royal Philippine company, 386; Need of nautical school, 386; Local progress under adverse conditions, 387; Handicapped in outside trade, 388; Profit percent to go to Spain, 390; Need of special privileges, 390; Spanish commerce in its infancy, 391; Extension of monopoly urged, 400; Slight concession to the Company, 403; Shipping reform, 422; Business, 461; Commerce, 462; Customs dues, 512; Filipino merchants of the early $1890 \mathrm{~s}, 552$.

Dress-Pretty girls in gay garments, 29; Dress of the poorer women, 30; Men's clothing, 30; The "Principales," 30; The servants, 31; The dandies, 31; Mestiza costume, 31; Clothing, 148; Women's extras, 277; Clothing cost, 277.

Dwellings-Native houses comfortable and unchanged, 25; Board houses and their furniture, 58; Homes, 145; Household affairs, 147; Furniture, 148; Household furniture, 278; Dwellings, 461.

## Index-(Continued)

Dutch-Dutch and English stand well in their colonies, 32; Dutch colonials well educated, 33; Different English and Dutch policy, 120; Death customs, 201; Dutch opposition, 349.

Earthquakes-Scanty data available, 8; Former heavy shocks, 7; The 1610 catastrophe, 8; The 1863 earthquake, 6; Destruction in walled city, Manila, 7; Damage in Cavite, 7; Frequent minor disturbances, 8; Earthquake evidences, 77; Sorsogon earthquake, 107; 1628 Camarines earthquake, 129.

English-Capture of "Santa Anna," 21; Dutch and English stand well in their colonies, 32; English occupation, 349; Contract with English colonies, 353; English-Sulu treaty, 515; Sulu victory over English, 517; Balambangan Island (English), 523.

Filipinos-Dreary and unprogressive life, 26; Native distrust of Europeans, 32; Social standing of Filipinos enhanced, 34; Spanish-Filipino bonds of union, 34; Initiative and individuality missing, 35; Imitation instilled and selfrespect banished, 35; Native art-sense spoiled, 36; Educated Filipino unnatural, 36; Indolence from absence of incentive, 36; Weakened character and want of dignity, 37; Carelessness from lack of responsibility, 37; Circumstances have favored the Filipinos, 37; Have fared better than the Mexicans, 38; Change from Malayan character, 46; Filipino hospitality, 79; A native captain, 82; Amateur scientists, 97; The native clergy, 123; Family income, 149; Woman's work, 150; Marriage age, 150; Infant mortality, 151; Imitation-mania, 152; The sickness in Siberia, 152; The itch, 152; Running amuck, 153; Sense of smell, 154; Respect for women and aged, 200; Sexual crimes, 203; Native contempt for private Spaniards, 211; Caroline Islands' possible influence on Filipinos, 243; A pleasing people, 262; Debts, 279; Public charity not accepted, 281; Morals, 282; Great infant mortality, 283; Origin of race, 359; Filipino farmers, 371; Restriction of native ordinations recommended, 443; Native efforts for self-defence, 446; Native assistance, 451; Natives, 508; Superiority of women, 509; People and prospects of the Philippines, 550; Filipino merchants of the early 1890s, 552.

Filipinos, Ancient-Burial customs, 248; Assistance from history, 545; Hair differences, 545; Ancestor worship, 546; Tattooing, 546; Teeth alterations, 547; Skull flattening, 548; Hope of Filipino and American study, 549; Comparison of Indio and Negrito skulls, 550; (See Philippines, Pre-Spanish).

Fishing-Picking fish, 57; Plunder, 84; Lived by seafishing and rain water, 241; Fishing, 251; Fish, 479.

Food-Easy food, 41; Meals, 146; Cost of food, 276.
Foreigners-M. de la Gironnière, 67; Tardy justice to foreigners, 304; Com petition of foreign merchants, 389; Magellan, 462.

Friars-A convento and the parish priest, 60; Unwelcome hospitality, 63; An early friar attempt (Mt. Mayon), 88; Priestly assistance, 111; The priests, importance, 112; Franciscan friars, 112; Young men developed by responsibility, 113; Poor architects, 114; Superiority over government officials, 115; Former legal status, 116; A scientific priest-poet, 154; Friars an important factor, 352; Their defects have worked out for good. 352; Pious and

## Index-(Continued)

charitable funds' capital, 383; Standing of parish priests, 434; Friars only check on officials. 436; Missionaries' achievements, 436; Curtailing priestly authority, 437; Friars bulwark of Spanish rule, 438; Unwise to discredit priests, 439; Testimony in their behalf, 439; Ecclesiatical organization, 440; Dual supervision over friars, 441; Allowances from treasury, 441; Need of more European clergy, 442; Monasteries, 482.

Galleon-Trade-Galleon story sidelight on colonial history, 17; Chinese part in galleon trade, 18; Division of space and character of cargo, 18; Favoritism in allotment of cargo space, 18; Profit in trade, 18; Evasion of regulations, 19; Route outward, 20; Length of voyage, 20; Water-supply crowded out by cargo, 20; California landfall, 21; Galleon's size and armament, 21; Speedy return voyage, 21; Value of return freight, 22; "Philippine Company and smugglers cause change, 22; Gambling rather than commerce, 22; Undervaluation of galleon goods, 403; Variations in valuations, 405; Galleon graft, 423.

Government-Low taxes, 39; Unreliability of government reports, 54; Wine and liquor monopoly a failure, 71; Handicapped officials, 106; Funds diverted to Spain, 107; Alcaldes formerly in trade, 116; Their borrowed capital, 117; Improvement in present appointees, 117; Unidentified with country, 118; Similarity with Chinese conditions, 118; Dependence on interpreters, 119; Fear of officials' popularity, 120; Different English and Dutch policy, 120; Papal concessions to Spain, 128; Schools, 149; An unfortified fort, 165; Policy of non-intercourse with heathens, 192; A policy of peace, 194; No protection from Government, 212; Electing officers, 222; Palapat Revolt, 222; Qrnamental but useless forts, 232; Speculation with public funds, 317; Wholesale rate higher than retail from government, 325 ; Unthinking policy of greed, 344; The feudal ' 'encomiendas," 345; Extortions of encomenderos, 346; Many minor uprisings from local grievances, 350; Cavite 1872 mutiny, 351; Menaces to Spanish rule, 353; Restricted cultivation, 360; Confiscating unused lands, 372; Inıprovement in public finances 393; Economy over Spanish-American colonial administration, 393; Custom house, 401; Former customs usage, 401; Unbusinesslike customs ways, 404; Folly of monopoly plan, 407; Community funds, 416; Disbursements and general exprenses, 421; Defence expenses, 422; The navy, 424; Objectionable office-holders,

- 426; Evils from officials in trade, 427; No check on extortion, 429; Less complaisant laws needed, 430; Pioneer Philippine government a theocracy, 434; Governmental lenience, 445; The governor-general, 473; Government, 484; Government, 510.
Industries (See also Agriculture and Fishing)-Tapis weaving, 58; Petaca cigar cases, 59; Preparation of material, 59; Costly weaving, 59; Kupang ironfoundry, 62; Trade in molave, 75; Nito cigar cases, 98; Pineapple fiber preparation, 131 ; Slight industrial progress, 144; Gold mining, 166; Abandoned workings, 169; Manufactures, 201; Oil factory, 256; Weaving, 301; Machine-spinning, 307; Fiber-extracting machinery, 308; Methods of Manufacture, 361; Manufactures, 375; Native cloth weaving, 375; Aptitude for, but no development of, manufacturing, 376; Improved methods and machinery needed, 376; Piña, 475.
abor-Servant subterfuges, 101; Petty robberies, 101; Wages, 149; A clever pilfering servant, 163; Unreliable excuses, 182; The Filipino as a laborer,


## Index-(Continued)

185; Forced labor, 206; Carpentering difficulties, 215; Losing a clever assistant, 216; Unsatisfactory forced labor, 223; Wages, 278; Laborers' work and wages, 299; Good work for good pay, 304; Compulsory labor, 372; No legal obstacle to forced labor, 374; Wages, 470.

Lakes-The Lagoon of Bay, 63; Maycap Lake, 69; Lake Palakpakan, 69; Batu-The lake, 121; Lake Buhi, 128; Changes in Batu Lake, 208; Jaruanan Lake, 265; Bito Lake, 267.
Land-Sea's encroachments, 108; Land for everybody, 145; Land leases, 149; A bare plain and wretched village, 194; Land tenure, 273; Land tenure, 287; Land disputes, 291.
Luzon-Luzon, 48; Luzon Provinces and their languages and populations, 53; Coasting Luzon, 80; Camarines, 109.

Manila-Foreign mail facilities, 5; Cits's appearance mediaeval European, 6; Manila's fine bay, 6; Shelter for shipping, 9; Few foreign vessels, 10; Silting up of river mouth, 10; Manila's favorable location, 12; British occupation inspired new wąnts, 15; Manila opposition to trade innovations, 15; Port's importance lessened under Spain, 16; Trade free but port charges discriminating, 16; Entrance of foreign ships and firms, 16; The walled city of Manila, 23; Population, 23; Discomforts and high cost of living, 24; Bridges. 23; Neglected river and canals offensive, 25; Feminine attractiveness, 28; The Luneta, 28; The Angelus, 29; Botanical garden, 29; Frequence of fires, 56; Commercial importance of early Manila, 348; Manila as capital of a vast empire, 348; Manila's population, 359; Port charges and duties, 402; A Spanish oriental city, 459; Twin piers, 460; City of Manila, 462; The Luneta, 477; The cemetery, 481.
Mestizos (Half-castes)-Friction between classes, 23; Mestizas, 28; Clever business women, 31; Ill at ease in society, 31; Mestizos, 31; Danger from mestizos and creoles, 351.

Micronesians-Pearl divers from the Carolines, 239; Hardships and perils of their voyage, 239; Castaways from the Pelews, 240; Not the first time for one, 241; Previous castaways, 241; Other arrivals of Micronesians, 242.

Mindanao-Mindanao, 54; Old Zamboanga fort, 286; Mindanao and Sulu independent, 343; Council of war recommended, 450; Mindanao also needs attention, 452; A plan for future policing, 453; Mindanao, 497; Zamboanga, 499. (See "Moros.")

Minerals-A primitive rock breaker, 167; An arrastre, 167; Gold-washing, 168; The clean-up, 168; Copper, 172; Paying minus dividends, 172; Unsuccessful copper-mining, 172; Igorot-mining successful, 172; Copper kettles attributed to Negritos, 173; Copper-working a pre-Spanish art, 173; The Igorots' Method, 174; The Smelter, 175; Smelting, 175; The copper "stone," 176; Purifying the product, 176; Miners' uncertain returns, 178; Small output, 179; Wild Cat Mining. 179; Jasper and coal, 235; Gold, 368; Copper, 368; Cinnabar, 369 ; Iron, 369.
Mountaineers-A negrito family, 62; Remontados, 124; Iriga settlements, 126; Poison arrows, 126; Crucifixes, 126; Mountaineers' arrow poison, 132; Primitive mountaineers, 191; Christian Mountaineers' villages, 193; A

## Index-(Continued)

heathen Mountaineers' settlement, 197; A giant fern hedge, 198; Simple stringed instruments, 198; Religion, 200; Medicine, 201; Marriage, 202; Farewell to mountaineers, 205; A forest home, 268; Mountaineers, 271; Foreigners and wild tribes, 358; Mountaineers, 483.

Mountains-Mt. Arayat, 57; Mt. Iriga, 126; Another attempt at mountain climbing, 130; Rain prevents another ascent, 132; Mt. Isaróg, 190; Comparison with Javan Mountain district, 195; At the summit, 203; The descent, 204; Mt. Iriga, 207; The ascent, 207; Altitude, 208; Ascent of Mt. Mazaraga, 209; Altitude, 210; Climbing Banajao, 488; Mt. Maquiling, 492;
Moros-Moro pirates, 103; Pirate rumors and robberies, 108; Real pirates, 109; Power of Moro pirates, 211; Government steamer easily eluded, 213; Steam gunboats more successful, 213; Renegades join pirates and bandits, 214; Pirate outrages, 222; A pirate base, 224; Moro depredations, 443; Authority for war not lacking, 445; Moro piratical craft, 446; Growth of Moro power, 448; Pirate craft, 502.
Palms (Coco, nipa, bonga)-Coco-palms, 42; Nipa-palms, 42; Palm brandy, 69; Bought by government. 70; Profit in manufacture, 70; A pretty fan-palm, 170; Making palm-sugar, 183; A petition for liquors, 206; A secret still, 269; Coco and nipa wine monopoly, 398; Buyo monopoly unsatisfactory, 406.
Pasig River-River resorts, 40; Sleeping pilots, 40; River's importance, 41; Riverside gaiety, 41; The Pasig, 64.
Philippines, Pre-Spanish-Ancient Filipino civilization, 143; Guesses at history from language, 143; Regard for the sleeping, 154; Prehistoric remains, 155; Ancient Chinese jar, 156; Used as tea canisters, 156; Prized by Japanese, 157; Strict search in Japan, 157; \$3,500 for a jar, 158; A speaking jar, 158; Found in Borneo, 158; A consecrated jar, 159; Tea societies, 160; Ceremonies, 160; Their object, 160; Reward of valor, 161; Superstitions, 162; Burial caves, 244; Objects destroyed but superstition persists, 245; Skulls from a rock near Basey, 245; The cavern's contents, 246; Impressive loca; tion of burial cave, 246; Burial caves, 247; Chinese dishes from a cave, 247Embalming, 248; Slaves sacrificed, 249; Suitor's service, 282; Superstitions, 283; Festivals and shrines, 284; Ancestor worship, 284; Ancient literature, 284; Old religion, 285; Creation myth, 285. (See Filipinos, Ancient.)
Poultry-Poultry, 276; Ducks, 479; Duck farms, 486.
Philippines-A compromise civilization, 35; Spanish rule not benevolent, but beneficial, 37; A land of opportunity, 38; Fortunate factors, 39; Laborsaving conditions, 40; Archipelago's great extent, 47; Favored by position and conditions, 47; Soil and sea alike productive, 48; Harbors and water highways, 48; Provinces and districts, 53; Population, 53; Language and dialects, 53; Outlying islands, 54; Importance of interpreter in Philippines, 119; Progress under Spain, 144; Similarity to Indian Archipelago conditions, 192; Yap camotes from Philippines, 241; Spain's discovery and occupation, 342; Numerous names, 343; Spanish improvements, 343; Spain and Portugal united, 348; Phillippine history unimportant and unsatisfactory, 349; Summing up, 352; Powerful neighbors, 354; Nearing predominance of the Pacific, 355; Need of Phlippine awakening, 356; Population, 357; Plans for progress, 371; The undeveloped Philippines, 373; Philippines a burden to Spain, 391; War popular in Philippines, 451; Importance of peace for Philippine progress, 457; Resources, 465; Population, 472; Population, 511.

## Index-(Continued)

Products (See also Food, Coffee, Cacao, Bamboo and Palms)-Quicksilver, 107; A neglected product, 122; Piña, 131; Red lead, 166; Edible bird's nests, 169; Lead and mica, 170; Chrome-lead ore, 170; Batatas, 199; Molave, 231; Ignatius bean, 253; Strychnine, 254; Coconuts, 255; Getting coco oil, 256; Sulphur, 263; Prices, 263; A solfatara, 264; Danan solfatara, 265; Balao oil, 274; Other products, 274; Wax, 275; A valuable by-product, 293; Papermaking materials, 309; Increasing use of wood and straw, 309; Preferability of discarded cloth, 309; Cotton, 359; Mulberry trees, 362; Silk, 362; Beeswax, 363; Black pepper, 363; Cinnamon, 365; Nutmeg, 366; Timber, 367; Dye and cabinet woods, 367; Pearls, 370; Sulphur, 370; Tobacco belt, 395; "Tuba," 399; Coco-wine, 399; Nipa brandy, 400; Hardships on areca-nut planters, 406; The areca-nut, 406; Cotton, 470; Indigo, 471.

Punishments-Pleasant prison life, 45; Frequent floggings little regarded, 46.
Rice-Rice cultivation, 139; Rice land production, 140; The harvest, 140; Rice and abaca exported, 144; Rice-farming, 272; Mountain rice, 273; Rice, 366; High yield, 366; Rice, 467.

Rivers-Mapon river, 73; Sapa river, 133; Quinali river, 136; River highways, 188; Many mountain water courses, 195; A changed river and a new town, 225; Up the river, 225; On the Calbayot River, 227; Numerous small streams, 235; Down the river, 237; Basey and its river, 249; Up the Mañacagan, 263; Up Mayo River, 267. (See Pasig River.)
Roads-Albay roads and bridges, 105; Neglected roads, 184; Social and political reasons for bad roads, 189; Bad roads raise freights, 189; Lack of roads, 291; Poor roads, 234; An unpromising road, 267; Communication, 279.

Samar-Off to Samar, 216; Samar, 217; Former names, 217; Only the coast settled, 219; Catbalogan monopoly of interisland traffic, 224; Catbalogan, 228; Beauty of Samar-Leyte strait, 243; People of Samar and Leyte, 280.
San Bernardino Strait-The straits, 79; Importance of straits, 80; San Bernardino current, 82.
Snakes-Snake bite and rabies remedy, 151; Serpent-charmers, 231; Big pythons, 236; A sea snake, 247; Cholera and snake-bite cure, 254.
Spaniards-Spaniards transient, 24; Few large landowners, 24; Spanish officials undesirables, 33; Spanish lack of prestige deserved, 34; Latin races better for colonists in the tropics, 34; Spanish-Filipino bonds of union, 34; A worthy official, 85; A suspicious medal, 88; Spanish prejudice against bathing, 165; Spanish economic backwardness, 190; Native contempt for private Spaniards, 211; Obliging Spanish officials, 260; High character of early administrators, 344; Conquerors on commission, 345; Salcedo "most illustrious of the conquerors," 346; "The Cortes of the Philippines," 347; Undesirable emigrants from Spain, 349; Credit due Spain, 352; Spanish planters, 370; Legaspi, 464; Courteous Spanish officials, 474. Sulu victory over Spaniards 516.

Springs-Los Baños hot springs, 66; Igabo hot spring, 134; Naglegbeng silicious springs, 134; Carbonic acid spring, 205; A tideland spring, 237; Hot spring, 264; Los Baños, 490; The hot springs, 492.

Sugar-Sugar venders, 258; Sugar, 289; Sugar prices, 291; The future sugar market, 292; Sugar. 361; Sugar, 470.

## Index-(Continued)

Sulu-Sual's foreign trade, 287; Jolo, 449; Sulu, 500; Sulu harbor, 501; Visiting the Sultan, 503; Treaty with United States, 504; Interior travel prohibited, 505; A stolen granite monument, [506; Sulu history, 513; Tawi-Tawi, 514; English-Sulu treaty, 515; Sulu victory over Spaniards, 516; Sulu victory over English, 517; Sulu piracies, 518; Suppression of Sulu pirates, 519; The Bajows, 520; Cagayan Sulu, 521; Balabac straits, 522; Balambangan Island (English), 523; Dyaks, 524; Diwatas, 525; Headhunting, 526; Cremation, 527; Advantages of Sulu (American) treaty, 528.
Time-Magellan's mistake in reckoning, 1; Difference from European time, 1; Change to the Asian day, 2.
Title-The Pope's world-partition, 3; Faulty Spanish and Portuguese geography, 3; Spain's error in calculation, 4; Extravagant Spanish clains thru ignorance, 4; Moluccan rights sold to Portugal, 4.
Tobacco-Buyo and cigars, 147; Tobacco monopoly wars, 193; Tobacco prohibition, 270; Tobacco, 274; Tobacco revenue, 310; Injustice of the monopoly, 310; Résumé of regulations, 311; Tobacco from Mexico, 313; High grade of Philippine product, 314; Manila tobacco handicapped, 314; Hampered by government restrictions, 315; Origin of monopoly, 316; Governor Basco's innovations, 316; Different usages in Bisayas and Mindanao, 318; Changes bring improvement, 318; Crude system of grading, 318; Burden knowingly increased, 319; "Killing the goose that lays the golden egg," 320; Gift to Spain of unusable tobacco, 320; De La Gandara's proposed reforms, 321; Slight real profit from monopoly, 321; Suffering and law-breaking thru the monopoly, 322; Growing opposition to the monopoly, 323; Directions for cultivating tobacco, 326; Opposition to tobacco monopoly, 394; Doubling of insular revenue thru tobacco, 395; Cigar factories, 474.
Travel-Pleasures of travel, 45; Village rest houses, 45; The familiar field for travellers, 46; Carromata, 55; To Calumpit by carriage, 56; Calumpit, 57; To Baliwag, 58; Town of Bulacan, 55; Arrangements for travellers, 61; Talim island, 67; Santa Cruz, 72; Scenery along Lucban-Mauban road, 72; Lucban, 73; Hospitality of tribunal, 74; Calauan, 76; Majaijai, 76; Pila, 77; Mariveles, 78; To Albay by schooner, 78; Batangas coast, 81; Batangas exports, 81; An intermittent voyage, 83; Legaspi, 84; Sorsogon, 84; Daraga, 85; Bulusan, 104; Casiguran, 107; Batu, 121; Nabua, 124; Prison as hotel, 133; Nueva Caceres, 137; Naga, 137; The Bicols, 138; Land of the Bicols, 138; Bicol language, 139; Yamtik and Visita Bicul, 162; Trip with Internal Revenue Collector, 164; Rooming in a powder-magazine, 171; Labo, 178; Indang, 179; On foot to San Miguel bay, 180; Colasi, 181; Pasacao, 186; A beautiful coast, 187; Cabusao and Pasacao harbors, 188; Useful friends, 196; A tedious but eventful voyage, 220; Dini portage, 236; Lauang, 220; Paranas, 233; Running the rapids, 234; Hammock-traveling, 234; Loquilocun, 234; Along the coast, 237; A futile sea voyage in an open boat, 243; A portage, 250; Tacloban to Tanauan, 261; The height of hospitality, 262; A country excursion, 486; Recent elevation of coast, 252; To Dulag, 266; Paragua, 456; Mindoro, 494; San José, 496; Caldera fort, 498; Marongas island, 507.
Volcanos-Volcanic stone quarries, 59; Llanura de Imuc, 68; Tigui-mere, 68; Leaf imprints in lava, 68; Bulusan like Vesuvius, 81; A chain of volcanos, 110; Ascent of Mayon, 86; The descent, 87; Estimates of height, 89; Unreliable authorities, 130; Four volcanos, 164.

# The Former Philippines thru Foreign Eyes 

JAGOR'S TRAVELS IN THE PHILIPPINES

## I

WHEN the clock strikes twelve in Madrid,* it is 8 hours, 18 minutes, and 41 seconds past eight in the evening at Manila; that is to say, the latter city lies $124^{\circ} 40^{\prime} 15^{\prime \prime}$ to the east of the former ( 7 hours, 54 minutes, 35 seconds from Paris). Some time ago, however, while the new year was being celebrated in Madrid, it was only New Year's eve at Manila.

As Magellan, who discovered the Philippines in his memorable first circumnavigation of the globe, was

Difference
from
European time.

Magellan's mistake in reckoning. following the sun in its apparent daily path around the world, every successive degree he compassed on his eastern course added four minutes to the length of his day; and, when he reached the Philippines, the difference amounted to sixteen hours. This, however, apparently escaped his notice, for Elcano, the captain of the only remaining vessel, was quite unaware, on his return to the longitude of his departure, why according to his ship's log-book, he was a day behind the time of the port which he had reached again by continuously sailing westward. $\dagger \ddagger$

[^1]Change to the Asian day.

Future in
American and Australian trade.

The error remained also unheeded in the Philippines. It was still, over there, the last day of the old year, while the rest of the world was commencing the new one; and this state of things continued till the close of 1844, when it was resolved, with the approval of the archbishop, to pass over New Year's eve for once altogether.* Since that time the Philippines are considered to lie no longer in the distant west, but in the far east, and are about eight hours in advance of their mother country. The proper field for their commerce, however, is what is to Europeans the far west; they were colonized thence, and for centuries, till 1811, they had almost no other communication with Europe but the indirect one by the annual voyage of the galleon between Manila and Acapulco. Now, however, when the eastern shores of the Pacific are at last beginning to teem with life, and, with unexampled speed, are pressing forward to grasp their stupendous future, the Philippines will no longer be able to remain in their past seclusion. No tropical Asiatic colony is so favorably situated for communication with the west coast of America, and it is only in a few matters that the Dutch Indies can compete with them for the favors of the Australian market. But, on the other hand, they will have to abandon their traffic with China, whose principal emporium Manila originally was, as well as that with those westwardlooking countries of Asia, Europe's far east, which lie nearest to the Atlantic ports. $\dagger \ddagger$

[^2]When the circumstances mentioned come to be realized, the Philippines, or, at any rate, the principal market for their commerce, will finally fall within the limits of the western hemisphere, to which indeed they were relegated by the illustrious Spanish geographers at Badajoz.

The Bull issued by Alexander VI,* on May 4, 1493, which divided the earth into two hemispheres, decreed that all heathen lands discovered in the eastern half should belong to the Portuguese; in the western half to the Spaniards. According to this arrangement, the latter could only claim the Philippines under the pretext that they were situated in the western hemisphere. The demarcation line was to run from the north to the south, a hundred leagues to the south-west of all the so-called Azores and Cape de Verde Islands. In accordance with the treaty of Tordesillas, negotiated between Spain and Portugal on June 7, 1494, and approved by Julius II, in 1506, this line was drawn three hundred and seventy leagues west of the Cape de Verde Islands.

At that time Spanish and Portuguese geographers reckoned seventeen and one-half leagues to a degree on the equator. In the latitude of the Cape de Verde Islands, three hundred and seventy leagues made $21^{\circ} 55^{\prime}$. If to this we add the longitudinal difference between the westernmost point of the group and Cadiz, a difference of $18^{\circ} 48^{\prime}$, we get $40^{\circ} 43^{\prime}$ west, and $139^{\circ} 17^{\prime}$ east from Cadiz (in round numbers $47^{\circ}$ west and $133^{\circ}$ east), as the limits of the Spanish hemisphere. At that time, however, the existing means for such calculations were entirely insufficient.

The latitude was measured with imperfect astrolabes, or wooden quadrants, and calculated from very deficient

[^3]Extravagant Spanish claims thru ignorance.

Spain's error in calculation.
tables; the variation of the compass, moreover, was almost unknown, as well as the use of the log.* Both method and instruments were wanting for useful longitudinal calculations. It was under these circumstances that the Spaniards attempted, at Badajoz, to prove to the protesting Portuguese that the eastern boundary line intersected the mouths of the Ganges, and proceeded to lay claim to the possession of the Spice Islands.

The eastern boundary should, in reality, have been drawn $461 / 2^{\circ}$ further to the east, that is to say, as much further as it is from Berlin to the coast of Labrador, or to the lesser Altai; for, in the latitude of Calcutta $461 / 2^{\circ}$ are equivalent to two thousand five hundred and seventyfive nautical miles. Albo's log-book gives the difference in longitude between the most eastern islands of the Archipelago and Cape Fermoso (Magellan's Straits), as $106^{\circ} 30^{\prime}$, while in reality it amounts to $159^{\circ} 85^{\prime}$.

Moluccan rights sold to Portugal.

The disputes between the Spaniards and the Portuguese, occasioned by the uncertainty of the eastern boundary-Portugal had already founded a settlement in the Spice Islands-were set at rest by an agreement made in 1529, in which Charles V. abandoned his pretended rights to the Moluccas in favor of Portugal, for the sum of 350,000 ducats. The Philippines, at that time, were of no value.

The distance from Manila to Hongkong is six hundred fifty nautical miles, and the course is almost exactly south-east. The mail steamer running between the two

[^4]ports makes the trip in from three to four days. This allows of a fortnightly postal communication between the colony and the rest of the world.*

This small steamer is the only thing to remind an observer at Hongkong, a port thronged with the ships of all nations, that an island so specially favored in conditions and fertility lies in such close proximity.
Although the Philippines belong to Spain, there is but little commerce between the two countries. Once the tie which bound them was so close that Manila was wont to celebrate the arrival of the Spanish mail with Te Deums and bell-ringing, in honor of the successful achievement of so stupendous a journey. Until Portugal fell to Spain, the road round Africa to the Philippines was not open to Spanish vessels. The condition of the overland route is sufficiently shown by the fact that two Augustinian monks who, in 1603, were entrusted with an important message for the king, and who chose the direct line through Goa, Turkey, and Italy, needed three years for reaching Madrid. $\dagger$

The trade by Spanish ships, which the merchants were compelled to patronize in order to avoid paying an additional customs tax, in spite of the protective duties for Spanish products, was almost exclusively in foreign goods to the colony and returning the products of the latter for foreign ports. The traffic with Spain was limited to the conveyance of officials, priests, and

[^5]their usual necessaries, such as provisions, wine and other liquors; and, except a few French novels, some atrociously dull books, histories of saints, and similar works.

Manila's fine bay.

City's appearance mediaeval European.

The 1863 earthquake.

The Bay of Manila is large enough to contain the united fleets of Europe; it has the reputation of being one of the finest in the world. The aspect of the coast, however, to a stranger arriving, as did the author, at the close of the dry season, falls short of the lively descriptions of some travellers. The circular bay, one hundred twenty nautical miles in circumference, the waters of which wash the shores of five different provinces, is fringed in the neighborhood of Manila by a level coast, behind which rises an equally flat table land. The scanty vegetation in the foreground, consisting chiefly of bamboos and areca palms, was dried up by the sun; while in the far distance the dull uniformity of the landscape was broken by the blue hills of San Mateo. In the rainy season the numerous unwalled canals overflow their banks and form a series of connected lakes, which soon, however, change into luxuriant and verdant ricefields.

Manila is situated on both sides of the river Pasig. The town itself, surrounded with walls and ramparts, with its low tiled roofs and a few towers, had, in 1859, the appearance of some ancient European fortress. Four years later the greater part of it was destroyed by an earthquake.

On June 3, 1863, at thirty-one minutes past seven in the evening, after a day of tremendous heat while all Manila was busy in its preparations for the festival of Corpus Christi, the ground suddenly rocked to and fro with great violence. The firmest buildings reeled visibly,' walls crumbled, and beams snapped in two. Tne dreadful shock lasted half a minute; but this little interval
was enough to change the whole town into a mass of ruins, and to bury alive hundreds of its inhabitants.* A letter of the governor-general, which I have seen, states that the cathedral, the government-house, the barracks, and all the public buildings of Manila were entirely destroyed, and that the few private houses which remained standing threatened to fall in. Later accounts speak of four hundred killed and two thousand injured, and estimate the loss at eight millions of dollars. Fortysix public and five hundred and seventy private buildings were thrown down; twenty-eight public and five hundred twenty-eight private buildings were nearly destroyed, and all the houses left standing were more or less injured.

At the same time, an earthquake of forty seconds' duration occurred at Cavite, the naval port of the Philippines, and destroyed many buildings.

Three years afterwards, the Duc d'Alencon (Lucon et Mindanao; Paris, 1870, S. 38) found the traces of the catastrophe everywhere. Three sides of the principal square of the city, in which formerly stood the government, or governor's, palace, the cathedral, and the townhouse, were lying like dust heaps overgrown with weeds. All the large public edifices were "temporarily" constructed of wood; but nobody then seemed to plan anything permanent.

Manila is very often subject to earthquakes; the most fatal occurred in 1601; in 1610 (Nov. 30); in 1645 (Nov.

Damage in Cavite.

Destruction in walled city.

Former heavy shocks. 30 ); in 1658 (Aug. 20); in 1675; in 1699; in 1796; in 1824; in 1852; and in 1863. In 1645, six hundred $\dagger$, or, according to some accounts, three thousand $\ddagger$ persons perished, buried under the ruins of their houses. Their

[^6]monastery, the church of the Augustinians, and that of the Jesuits, were the only public buildings which remained standing.

Frequent minor disturbances.

Scanty data available.

The 1610 catastrophe.

Smaller shocks, which suddenly set the hanging lamps swinging, occur very often and generally remain unnoticed. The houses are on this account generally of but one story, and the loose volcanic soil on which they are built may lessen the violence of the shock. Their heavy tiled roofs, however, appear very inappropriate under such circumstances. Earthquakes are also of frequent occurrence in the provinces, but they, as a rule, cause so little damage, owing to the houses being constructed of timber or bamboo, that they are never mentioned.
M. Alexis Perrey (Mém. de l'Académie de Dijon, 1860) has published a list, collected with much diligence from every accessible source, of the earthquakes which have visited the Philippines, and particularly Manila. But the accounts, even of the most important, are very scanty, and the dates of their occurrence very unreliable. Of the minor shocks, only a few are mentioned, those which were noticed by scientific observers accidentally present at the time.

Aduarte (I. 141) mentions a tremendous earthquake which occurred in 1610. I briefly quote his version of the details of the catastrophe, as I find them mentioned nowhere else.
"'Towards the close of November, 1610, on St. Andrew's Day, a more violent earthquake than had ever before been witnessed, visited these Islands; its effects extended from Manila to the extreme end of the province of Nueva Segovia (the whole northern part of Luzon), a distance of 200 leagues. It caused great destruction over the entire area; in the province of Ilocos it buried palm trees, so that only the tops of their branches were left above the
earth's surface; through the power of the earthquake mountains were pushed against each other; it threw down many buildings, and killed a great number of people. Its fury was greatest in Nueva Segovia, where it opened the mountains, and created new lake basins. The earth threw up immense fountains of sand, and vibrated so terribly that the people, unable to stand upon it, laid down and fastened themselves to the ground, as if they had been on a ship in a stormy sea. In the range inhabited by the Mendayas a mountain fell in, crushing a village and killing its inhabitants. An immense portion of the cliff sank into the river; and now, where the stream was formerly bordered by a range of hills of considerable altitude, its banks are nearly level with the watercourse. The commotion was so great in the bed of the river that waves arose like those of the ocean, or as if the water had been lashed by a furious wind. Those edifices which were of stone suffered the most damage, our church and the convent fell in, etc., etc."

## II

The customs inspection, and the many formalities which the native minor officials exercised without any consideration appear all the more wearisome to the new arrival when contrasted with the easy routine of the English free ports of the east he has just quitted. The guarantee of a respectable merchant obtained for me, as a particular favor, permission to disembark after a detention of sixteen hours; but even then I was not allowed to take the smallest article of luggage on shore with me.

During the south-west monsoon and the stormy season that accompanies the change of monsoons, the

Customhouse red tape.

Shelter for shipping. roadstead is unsafe. Larger vessels are then obliged to seek protection in the port of Cavite, seven miles further down the coast; but during the north-east monsoons they can safely anchor half a league from the coast.' All ships under three hundred tons burden pass
the breakwater and enter the Pasig, where, as far as the bridge, they lie in serried rows, extending from the shore to the middle of the stream, and bear witness by their numbers, as well as by the bustle and stir going on amongst them, to the activity of the home trade.

Silting $u p$ of river mouth.

Few foreign vessels.

Antiquated restrictions on trade.

In every rain-monsoon, the Pasig river sweeps such a quantity of sediment against the breakwater that just its removal keeps, as it seems, the dredging machine stationed there entirely occupied.

The small number of the vessels in the roadstead, particularly of those of foreign countries, was the more remarkable as Manila was the only port in the Archipelago that had any commerce with foreign countries. It is true that since 1855 three other ports, to which a fourth may now be added, had gotten this privilege; but at th time of my arrival, in March, 1859, not one of them had ever been entered by a foreign vessel, and it was a few weeks after my visit that the first English ship sailed into Iloilo to take in a cargo of sugar for Australia.*

The reason of this peculiarity laid partly in the feeble development of agriculture, in spite of the unexampled fertility of the soil, but chiefly in the antiquated and artificially limited conditions of trade. The customs duties were in themselves not very high. They were generally about seven per cent. upon merchandise conveyed under the Spanish flag, and about twice as much for that carried in foreign bottoms. When the cargo was of Spanish production, the duty was three per cent. if carried in national vessels, eight per cent. if in foreign ships. The latter were only allowed, as a rule, to enter the port in ballast. $\dagger$

[^7]As, however, the principal wants of the colony were imported from England and abroad, these were either kept back till an opportunity occurred of sending them in Spanish vessels, which charged nearly a treble freight (from $£ 4$ to $£ 5$ instead of from $£ 11 / 2$ to $£ 2$ per ton), and which only made their appearance in British ports at rare intervals, or they were sent to Singapore and Hongkong, where they were transferred to Spanish ships. Tonnage dues were levied, moreover, upon ships in ballast, and upon others which merely touched at Manila without unloading or taking in fresh cargo; and, if a vessel under such circumstances landed even the smallest parcel, it was no longer rated as a ship in ballast, but charged on the higher scale. Vessels were therefcre forced to enter the port entirely devoid of cargo, or carrying sufficient to cover the expense of the increased harbor dues; almost an impossibility for foreign ships, on account of the differential customs rates, which acted almost as a complete prohibition. The result was that foreign vessels came there only in ballast, or when summoned for some particular object.

The exports of the colony were almost entirely limited to its raw produce, which was burdened with an export duty of three per cent. Exports leaving under the Spanish flag were only taxed to the amount of one per cent.; but, as scarcely any export trade existed with Spain, and as Spanish vessels, from their high rates of freight, were excluded from the carrying trade of the world, the boon to commerce was a delusive one.*

These inept excise laws, hampered with a hundred suspicious forms, frightened away the whole carrying

Discouragement, for foreion ship.

Export taxes.

Laws drove avay trade. trade from the port; and its commission merchants were

[^8]Manila's favorable docation.

The 1869 reform.

Bettered conditions.

Pre-Spanish foreign commerse.
frequently unable to dispose of the local produce. So trifling was the carrying trade that the total yearly average of the harbor dues, calculated from the returns of ten years, barely reached $\$ 10,000$.

The position of Manila, a central point betwixt Japan, China, Annam, the English and Dutch ports of the Archipelago and Australia, is in itself extremely favorable to the development of a world-wide trade.* At the time of the north-eastern monsoons, during our winter, when vessels for the sake of shelter pass through the Straits of Gilolo on their way from the Indian Archipelago to China, they are obliged to pass close to Manila. They would find it a most convenient station, for the Philippines, as we have already mentioned, are particularly favorably placed for the west coast of America.

A proof that the Spanish Ultramar minister fully recognizes and appreciates these circumstances appears in his decree, of April 5, 1869, which is of the highest importance for the future of the colony. It probably would have been issued earlier had not the Spanish and colonial shipowners, pampered by the protective system, obstinately struggled against an innovation which impaired their former privileges and forced them to greater activity.

The most noteworthy points of the decree are the moderation of the differential duties, and their entire extinction at the expiration of two years; the abrogation of all export duties; and the consolidation of the more annoying port dues into one single charge.

When the Spaniards landed in the Philippines they found the inhabitants clad in silks and cotton stuffs, which were imported by Chintse ships to exchange for

[^9]gold-dust, sapan wood,* holothurian, edible birds' nests, and skins. The Islands were also in communication with Japan, Cambodia, Siam $\dagger$, the Moluccas, and the Malay Archipelago. De Barros mentions that vessels from Luzon visited Malacca in $1511 . \ddagger$

The greater order which reigned in the Philippines after the advent of the Spaniards, and still more the commerce they opened with America and indirectly with Europe, had the effect of greatly increasing the Island trade, and of extending it beyond the Indies to the Persian Gulf. Manila was the great mart for the products of Eastern Asia, with which it loaded the galleons that, as early as 1565, sailed to and from New Spain (at first to Navidad, after 1602 to Acapulco), and brought back silver as their principal return freight.§

The merchants in New Spain and Peru found this commerce so advantageous, that the result was very damaging to the exports from the mother country, whose manufactured goods were unable to compete with the Indian cottons and the Chinese silks. The spoilt monopolists of Seville demanded therefore the abandon-

[^10]```
Early extension under Spain.
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Jealousy of Seville monopolists.
ment of a colony which required considerable yearly contributions from the home exchequer, which stood in the way of the mother country's exploiting her American colonies, and which let the silver of His Majesty's dominions pass into the hands of the heathen. Since the foundation of the colony they had continually thrown impediments in its path.* Their demands, however, were vain in face of the ambition of the throne and the influence of the clergy; rather, responding to the views of that time the merchants of Peru and New Spain were forced, in the interests of the mother country, to obtain merchandise from China, either directly, or through Manila. The inhabitants of the Philippines were alone permitted to send Chinese goods to America, but only to the yearly value of $\$ 250,000$. The return trade was limited to $\$ 500,000 . \dagger$

The first amount was afterwards increased to $\$ 300,000$, with a proportionate augmentation of the return freight; but the Spanish were forbidden to visit China, so that they were obliged to await the arrival of the junks. Finally, in 1720, Chinese goods were strictly prohibited throughout the whole of the Spanish possessions in both hemispheres. A decree of 1734 (amplified in 1769) once more permitted trade with China, and increased the maximum value of the annual freightage to Acapulco to $\$ 500,000$ (silver) and that of the return trade to twice the amount.

After the galleons to Acapulco, which had been maintained at the expense of the government treasury, had stopped their voyages, commerce with America was

[^11]handled by merchants who were permitted in 1820, to export goods up to $\$ 750,000$ annually from the Philippines and to visit San Blas, Guayaquil and Callao, besides Acapulco.
This concession, however, was not sufficient to compensate Philippine commerce for the injuries it suffered through the separation of Mexico from Spain. The possession of Manila by the English, in 1762, made its inhabitants acquainted with many industrial products which the imports from China and India were unable to offer them. To satisfy these new cravings Spanish men-of-war were sent, towards the close of 1764 , to the colony with products of Spanish industries, such as wine, provisions, hats, cloth, hardware, and fancy articles.

The Manila merchants, accustomed to a lucrative trade with Acapulco, strenuously resisted this innovation, although it was a considerable source of profit to them, for the Crown purchased the Indian and Chinese merchandise for its return freights from Manila at double their original value. In 1784, however, the last of these ships arrived.

After the English invasion, European vessels were strictly forbidden to visit Manila; but as that city did not want to do without Indian merchandise, and could not import it in its own ships, it was brought there in English and French bottoms, which assumed a Turkish name, and were provided with an Indian shamcaptain.

In 1785, the Compañia de Filipinas obtained a monopoly of the trade between Spain and the colony, but it was not allowed to interfere with the direct traffic be-

British occupation inspired new wants.

Manila opposition to trade innovations.

Subterfuges of European traders.

The
"Philippine Company" monopoly. tween Acapulco and Manila. The desire was to acquire large quantities of colonial produce, silk, indigo, cinnamon, cotton, pepper, etc., in order to export it somewhat

Losses by bad management.

Entrance of foreign ships and firms.

Trade free but port
charges
discriminating.

Port's
importance
lessened under Spain.
as was done later on by the system of culture in Java; but as it was unable to obtain compulsory labor, it entirely failed in its attempted artificial development of agriculture.

The Compaña suffered great losses through its erroneous system of operation, and the incapacity of its officials (it paid, for example, $\$ 13.50$ for a picul of pepper which cost from three to four dollars in Sumatra).

In 1789 foreign ships were allowed to import Chinese and Indian produce, but none from Europe. In 1809 an English commercial house obtained permission to establish itself in Manila.* In 1814, after the conclusion of the peace with France, the same permission, with greater or less restrictions, was granted to all foreigners.

In 1820 the direct trade between the Philippines and Spain was thrown open without any limitations to the exports of colonial produce, on the condition that the value of the Indian and Chinese goods in each expedition should not exceed $\$ 50,000$. Ever since 1834, when the privileges of the Compañia expired, free trade has been permitted in Manila; foreign ships, however, being charged double dues. Four new ports have been thrown open to general trade since 1855; and in 1869 the liberal tariff previously alluded to was issued.

Today, after three centuries of almost undisturbed Spanish rule, Manila has by no means added to the importance it possessed shortly after the advent of the Spaniards. The isolation of Japan and the IndoChinese empires, a direct consequence of the importunities and pretensions of the Catholic missionaries, $\dagger \cdot$

[^12]the secession of the colonies on the west coast of America, above all the long continuance of a distrustful commercial and colonial policy-a policy which exists even at the present day-while important markets, based on large capital and liberal principles, were being established in the most favored spots of the British and Dutch Indies; all these circumstances have contributed to this result and thrown the Chinese trade into other channels. The cause is as clear as the effect, yet it might be erroneous to ascribe the policy so long pursued to shortsightedness. The Spaniards, in their schemes of colonisation, had partly a religious purpose in view, but the government discovered a great source of influence in the disposal of the extremely lucrative colonial appointments. The crown itself, as well as its favorites, thought of nothing but extracting the most it could from the colony, and had neither the intention or the power to develop the natural wealth of the country by agriculture and commerce. Inseparable from this policy, was the persistent exclusion of foreigners.* It seemed even more necessary in the isolated Philippines than in America to cut off the natives from all contact with foreigners, if the Spaniards had any desire to remain in undisturbed possession of the colony. In face, however, of the developed trade of today and the claims of the world to the productive powers of such an extraordinarily fruitful soil, the old restrictions can no longer be maintained, and the lately-introduced liberal tariff must be hailed as a thoroughly well-timed measure.

The oft-mentioned voyages of the galleons betwixt Manila and Acapulco hold such a prominent position

Galleon story sidelight on colonial history.

[^13]in the history of the Philippines, and afford such an interesting glimpse into the old colonial system, that their principal characteristics deserve some description.

Chinese part in galleon trade.

Favoritism in allotment of cargo space.

Dixision of space and character of cargo.

In the days of Morga, towards the close of the sixteenth century, from thirty to forty Chinese junks were in the habit of annually visiting Manila (generally in March); towards the end of June a galleon used to sail for Acapulco. The trade with the latter place, the active operations of which were limited to the three central months of the year, was so lucrative, easy, and safe, that the Spaniards scarcely cared to engage in any other undertakings.

As the carrying power of the annual galleon was by no means proportioned to the demand for cargo room, the governor divided it as he deemed best; the favorites, however, to whom he assigned shares in the hold, seldom traded themselves, but parted with their concessions to the merchants.

According to De Guignes,* the hold of the vessel was divided into 1,500 parts, of which the majority were allotted to the priests, and the rest to favored persons. As a matter of fact, the value of the cargo, which was officially limited to $\$ 600,000$, was considerably higher. It chiefly consisted of Indian and Chinese cottons and silk stuffs (amongst others fifty thousand pairs of silk stockings from China), and gold ornaments. The value of the return freight amounted to between two and three millions of dollars.

Everything in this trade was settled beforehand; the number, shape, size, and value of the bales, and even their selling price. As this was usually double the original cost, the permission to ship goods to a certain amount was equivalent, under ordinary circumstankes, to the bestowal of a present of a like value. These

[^14]permissions or licenses (boletas) were, at a later period, usually granted to pensioners and officers' widows, and to officials, in lieu of an increase of salary; these favorites were forbidden, however, to make a direct use of them, for to trade with Acapulco was the sole right of those members of the Consulado (a kind of chamber of commerce) who could prove a long residence in the country and the possession of a capital of at least $\$ 8,000$.

Legentil, the astronomer, gives a full description of the regulations which prevailed in his day and the

Evasion of regulations. manner in which they were disobeyed. The cargo consisted of a thousand bales, each composed of four packets,* the maximum value of each packet being fixed at $\$ 250$. It was impossible to increase the amount of bales, but they pretty generally consisted of more than four packets, and their value so far exceeded the prescribed limits, that a boleta was considered to be worth from $\$ 200$ to $\$ 225$. The officials took good care that no goods should be smuggled on board without a boleta. These were in such demand, that, at a later period, Comyn $\dagger$ saw people pay $\$ 500$ for the right to ship goods, the value of which scarcely amounted to $\$ 1,000$. The merchants usually borrowed the money for these undertakings from the obras pias, charitable foundations, which, up to our own time, fulfil in the Islands the purposes of banks. $\ddagger$ In the early days of the trade, the galleon used to leave Cavite in July and sail with a south-westerly wind beyond the tropics,

[^15]until it met with a west wind at the thirty-eighth or

Route outward.

Water-supply crowded out by cargo. fortieth parallel.* Later on the vessels were ordered to leave Cavite with the first south-westerly winds to sail along the south coast of Luzon, through San Bernardino straits, and to continue along the thirteenth parallel of north latitude $\dagger$ as far to the east as possible, until the north-easterly trade wind compelled them to seek a north-west breeze in higher latitudes. They were then obliged to try the thirtieth parallel as long as possible, instead of, as formerly, the thirty-seventh. The captain of the galleon was not permitted to sail immediately northward, although to have done so would have procured him a much quicker and safer passage, and would have enabled him to reach the rainy zone more rapidly. To effect the last, indeed, was a matter of the greatest importance to him, for his vessel, overladen with merchandise, had but little room left for water; and, although he had a crew of from four hundred to six hundred hands to provide for, he was instructed to depend upon the rain he caught on the voyage; for which purpose, the galleon was provided with suitable mats and bamboo pails. $\ddagger$
Length of voyage.
Voyages in these low latitudes were, owing to the inconstancy of the winds, extremely troublesome, and often lasted five months and upwards. The fear of exposing the costly, cumbrous vessel to the powerful and sometimes stormy winds of the higher latitudes, appears to have been the cause of these sailing orders.

[^16]As soon as the galleon had passed the great Sargasso shoal, it took a southerly course, and touched at the southern point of the Californian peninsula (San Lucas), where news and provisions awaited it.* In their earlier voyages, however, they must have sailed much further to the north, somewhere in the neighborhood of Cape Mendocino, and have been driven southward in sight of the coast; for Vizcaino, in the voyage of discovery he undertook in 1603, from Mexico to California, found the principal mountains and capes, although no European had ever set his foot upon them, already christened by the galleons, to which they had served as landmarks. $\dagger$

The return voyage to the Philippines was an easy one, and only occupied from forty to sixty days. $\ddagger$ The galleon left Acapulco in February or March, sailed southwards till it fell in with the trade wind (generally in from $10^{\circ}$ to $11^{\circ}$ of north latitude), which carried it easily to the Ladrone Islands, and thence reached Manila by way of Samar.§

A galleon was usually of from twelve hundred to fifteen hundred tons burden, and carried fifty or sixty

California landfall.

Speedy return voyage. guns. The latter, however, were pretty generally banished to the hold during the eastward voyage. When the ship's bows were turned towards home, and there was no longer any press of space, the guns were remounted.

San Augustin says of the Santa Anna, which Thomas Candish captured and burnt in 1586 off the Californian
their guns for ballast; .... the pirate's venture was such a fortunate one that he returned to London with

[^17]Galleon's size and armament.
sails of Chinese damask and silken rigging." The cargo was sold in Acapulco at a profit of 100 per cent., and was paid for in silver, cochineal, quicksilver, etc.

Valuc of return freight.

Gambling rather than commerce.
"Philippine Company" and smugglers cause change.

Spanish coins in circulation on China coast. The total value of the return freight amounted perhaps to between two and three million dollars,* of which a quarter of a million, at least, fell to the king.

The return of a galleon to Manila, laden with silver dollars and new arrivals, was a great holiday for the colony. A considerable portion of the riches they had won as easily as at the gaming table, was soon spent by the crew; when matters again returned to their usual lethargic state. It was no unfrequent event, however, for vessels to be lost. They were too often laden with a total disregard to seaworthiness, and wretchedly handled. It was favor, not capacity, that determined the patronage of these lucrative appointments. $\dagger$ Many galleons fell into the hands of English and Dutch cruisers. $\ddagger$ But these tremendous profits gradually decreased as the Compañia obtained the right to import Indian cottons, one of the principal articles of trade, into New Spain by way of Vera Cruz, subject to a customs duty of 6 per cent; and when English and American adventurers began to smuggle these and other goods into the country.§ Finally, it may be mentioned that Spanish dollars found their way in the galleons to China and the further Indies, where they are in circulation to this day.

[^18]
## III

The city proper of Manila, inhabited by Spaniards, Creoles, the Filipinos directly connected with them, and Chinese, lies, surrounded by walls and wide ditches, on the left or southern bank of the Pasig, looking towards the sea.* It is a hot, dried-up place, full of monasteries, convents, barracks, and government buildings. Safety, not appearance, was the object of its builders. It reminds the beholder of a Spanish provincial town, and is, next to Goa, the oldest city in the Indies. Foreigners reside on the northern bank of the river; in Binondo, the headquarters of wholesale and retail commerce, or in the pleasant suburban villages, which blend into a considerable whole. The total population of city and suburbs has been estimated, perhaps with some exaggeration, at 200,000 . A handsome old stone bridge of ten arches serves as the communication between the two banks of the Pasig, which, more recently, has also been spanned by an iron suspension bridge. $\dagger$ Very little intercourse exists between the inhabitants of Manila and Binondo. Life in the city proper cannot be very pleasant; pride, envy, place-hunting, and caste

The walled city of Manila

Population.

Bridges.

Friction betusen classes. hatred, are the order of the day; the Spaniards consider themselves superior to the creoles, who, in their turn, reproach the former with the taunt that they have only come to the colony to save themselves from starvation.

[^19]A similar hatred and envy exists between the whites and the mestizos. This state of things is to be found in all Spanish colonies, and is chiefly caused by the colonial policy of Madrid, which always does its best to sow discord between the different races and classes of its foreign possessions, under the idea that their union would imperil the sway of the mother country.*

Few large landowners.

Spaniards transient.

Discomforts and high cost of living.

In Manila, moreover, this state of things was rendered worse by the fact that the planter class, whose large landed possessions always give it a strong interest in the country of its inhabitance, was entirely wanting. At the present day, however, the increasing demand for the produce of the colony seems to be bringing about a pleasant change in this respect. The manner in which the Spanish population of the Islands was affected by the gambling ventures of the galleons, at one time the only source of commercial wealth, is thus described by Murillo Velarde (page 272):-"The Spaniards who settle here look upon these Islands as a tavern rather than a permanent home. If they marry, it is by the merest chance; where can a family be found that has been settled here for several generations? The father amasses wealth, the son spends it, the grandson is a beggar. The largest capitals are not more stable than the waves of the ocean, across the crests of which they were gathered."

There is nothing like the same amount of sociability amongst the foreigners in Binondo as prevails in English and Dutch colonies; and scarcely any intercourse at all with the Spaniards, who envy the strangers and almost seem to look upon the gains the latter make in the country as so many robberies committed upon themselves, its owners. Besides all this, living is very expensive,

[^20]much more so than in Singapore and Batavia. To many, the mere cost of existence seems greatly out of proportion to their official salaries. The (European style) houses, which are generally spacious, are gloomy and ugly, and not well ventilated for such a climate. Instead of light jalousies, they are fitted with heavy sash windows, which admit the light through thin oyster shells, forming small panes scarcely two square inches in area, and held together by laths an inch thick. The ground floors of the houses are, on account of the great damp, sensibly enough, generally uninhabited; and are used as cellars, stables, and servant's offices.

The unassuming, but for their purposes very practical houses, of boards, bamboos, and (nipa) palm leaves, are supported on account of the damp on isolated beams or props; and the space beneath, which is generally fenced in with a railing, is used as a stable or a warehouse; such was the case as early as the days of Magellan. These dwellings* are very lightly put together. La Pérouse estimates the weight of some of them, furniture and all, at something less than two hundred pounds. Nearly all these houses, as well as the huts of the natives, are furnished with an azotea, that is, an uncovered space, on the same level as the dwelling, which takes the place of yard and balcony. The Spaniards appear to have copied this useful contrivance from the Moors, but the natives were acquainted with them before the arrival of the Europeans, for Morga mentions similar batalanes.

In the suburbs nearly every hut stands in its own garden. The river is often quite covered with green scum; and dead cats and dogs surrounded with weeds, which look like cabbage-lettuce, frequently adorn its

Neglected river and canals offensive.

[^21]Dreary and unprogressive life.

Cock-fighting.
waters. In the dry season, the numerous canals of the suburbs are so many stagnant drains, and at each ebb of the tide the ditches around the town exhibit a similar spectacle.

Manila offers very few opportunities for amusement. There was no Spanish theatre open during my stay there, but Tagalog plays (translations) were sometimes represented. The town possessed no club, and contained no readable books. Never once did the least excitement enliven its feeble newspapers, for the items of intelligence, forwarded fortnightly from Hongkong, were sifted by priestly censors, who left little but the chronicles of the Spanish and French courts to feed the barren columns of the local sheets.* The pompously celebrated religious festivals were the only events that sometimes chequered the wearisome monotony.

The chief amusement of the Filipinos is cock-fighting, which is carried on with a passionate eagerness that must strike every stranger. Nearly every man keeps a fighting cock. Many are never seen out of doors without their favorite in their arms; they pay as much as $\$ 50$ and upwards for these pets, and heap the tenderest caresses

[^22]
on them. The passion for cock-fighting can well be termed a national vice; but the practice may have been introduced by the Spaniards, or the Mexicans who accompanied them, as, in a like manner, the habit of smoking opium among the Chinese, which has become a national curse, was first introduced by the English. It is, however, more probable that the Malays brought the custom into the country. In the eastern portion of the Philippines, cock-fighting was unknown in the days of Pigafetta. The first cock-fight he met with was at Palawan. "They keep large cocks, which from a species of superstition, they never eat, but keep for fighting purposes. Heavy bets are made on the upshot of the contest, which are paid to the owner of the winning bird."* The sight is one extremely repulsive to Europeans. The ring around the cockpit is crowded

Probably Malay custom.

The cockpit with men, perspiring at every pore, while their countenances bear the imprint of the ugliest passions. Each bird is armed with a sharp curved spur, three inches long capable of making deep wounds, and which always causes the death of one or both birds by the serious injuries it inflicts. If a cock shows symptoms of fear and declines the encounter, it is plucked alive. Incredibly large sums, in proportion to the means of the gamblers, are wagered on the result. It is very evident that these cock-fights must have a most demoralising effect upon a people so addicted to idleness and dissipation, and so accustomed to give way to the impulse of the moment. Their effect is to make them little able to resist the temptation of procuring money without working for it. The passion for the game leads many to borrow at usury, to embezzlement, to theft, and even to

[^23]highway robbery. The land and sea pirates, of whom I shall speak presently, are principally composed of ruined gamesters.*

Feminine attractiveness.

In the comeliness of the women who lend animation to its streets Manila surpasses all other towns in the Indian Archipelago. Mallat describes them in glowing colors. A charming picture of Manila street life, full of local color, is given in the very amusing Aventures d'un Gentilhomme Breton. $\dagger$

How many of the prettiest Filipinas are of perfectly unmixed blood, it is, I confess, difficult to decide. Many of them are very fair and of quite an European type, and are thereby easily distinguished from their sisters in the outlying provinces. The immediate environs of Manila can boast many beautiful spots, but they are not the resort of the local rank and fashion, the object of whose daily promenade is the display of their toilettes, and not the enjoyment of nature. In the hot season, all who can afford it are driven every evening along the dusty streets to a promenade on the beach, which was built a short time back, where several times a week the band of a native regiment plays fairly good music, and there walk formally up and down. All the Spaniards

[^24]are in uniform or in black frock coats. When the bells the Angelus. ring out for evening prayer, carriages, horsemen, pedestrians, all suddenly stand motionless; the men take off their hats, and everybody appears momentarily absorbed in prayer.
The same governor who laid out the promenade established a botanical garden. It is true that everything he planted in it, exposed on a marshy soil to the full heat of a powerful sun, soon faded away; but its ground was enclosed and laid out, and though it was overgrown with weeds, it had at least received a name. At present it is said to be in better condition.*

The religious festivals in the neighborhood of Manila are well worth a visit, if only for the sake of the numerous

Botanical garden.

Pretty girls in gay garments. pretty Filipinas and mestizas in their best clothes who make their appearance in the evening and promenade up and down the streets, which are illuminated and profusely decked with flowers and bright colors. They offer a charming spectacle, particularly to a stranger lately arrived from Malaysia. The Filipinas are very beautifully formed. They have luxuriant black hair, and large dark eyes; the upper part of their bodies is clad in a homespun but often costly material of transparent fineness and snow-white purity; and, from their waist downwards, they are wrapped in a brightly-striped cloth (saya), which falls in broad folds, and which, as far as the knee, is so tighly compressed with a dark shawl (tapis), closely drawn around the

[^25]figure, that the rich variegated folds of the saya burst out beneath it like the blossoms of a pomegranate. This swathing only allows the young girls to take very short steps, and this timidity of gait, in unison with their downcast eyes, gives them a very modest appearance. On their naked feet they wear embroidered slippers of such a small size that their little toes protrude for want of room, and grasp the outside of the sandal.*
The poorer women clothe themselves in a saya, and in a so-called chemise, which is so extremely short that it frequently does not even reach the first fold of the former. In the more eastern islands grown-up girls and women wear, with the exception of a Catholic amulet, nothing but these two garments, which are, particularly after bathing, and before they get dried by the sun, nearly transparent.
Men's clothing.
A hat, trousers, and a shirt worn outside them, both made of coarse Guinara cloth, compose the dress of the men of the poorer classes. The shirts worn by the wealthy are often made of an extremely expensive home-made material, woven from the fibers of the pineapple or the banana. Some of them are ornamented with silk stripes, some are plain. They are also frequently manufactured entirely of jusi (Chinese floret silk), in which case they will not stand washing, and can only be worn once. The hat (salacot), a round piece of home-made plaiting, is used as both umbrella and sunshade, and is often adorned with silver ornaments

The "Principales." of considerable value. The principalia class enjoy the special privilege of wearing short jackets above their shirts, and are usually easily recognizable by their amusing assumption of dignity, and by the faded cylindrical hats, yellow with age, family heirlooms, constantly

[^26]worn. The native dandies wear patent leather shoes on The dandies. their naked feet, tight-fitting trousers of some material striped with black and white or with some other glaringly-contrasted colors, a starched plaited shirt of European make, a chimney-pot silk hat, and carry a cane in their hands. The servants waiting at dinner in their white starched shirts and trousers are by no means an agreeable spectacle, and I never realised the full ludicrousness of European male costume till my eye fell upon its caricature, exemplified in the person of a "Manila dandy."

The mestizas dress like the Filipinas, but do not wear the tapis, and those of them who are married to Europeans are generally clad in both shoes and stockings. Many of the mestizas are extremely pretty, but their gait drags a little, from their habit of wearing slippers. As a rule they are prudent, thrifty, and clever business women, but their conversation is often awkward and

## Mestiza

 costume.Clever business women. tedious. Their want of education is, however, not the cause of this latter failing, for Andalusian women who never learn anything but the elementary doctrines of Christianity, are among the most charming creatures in the world, in their youth. Its cause lies rather in this equivocal position; they are haughtily repelled by their white sisters, whilst they themselves disown their mother's kin. They are wanting in the ease, in the tact, that the women of Spain show in every relation of existence.

The mestizos, particularly those born of Chinese and

Ill at ease in society. Tagal mothers, constitute the richest and the most enterprising portion of the native population. They are well acquainted with all the good and bad qualities of the Filipino inhabitants, and use them unscrupulously for their own purposes.

Native distrust of Europeans.

Dutch and English stand well in their colonies.

## IV

A Scoтсн merchant to whom I brought a letter of introduction invited me with such cordiality to come and stay with him, that I found myself unable to refuse. While thus living under the roof and protection of one of the wealthiest and most respected men in the city, the cabmen I employed insisted on being paid beforehand every time I rode in their vehicles. This distrust was occasioned by the scanty feeling of respect most of the Europeans in Manila inspired in the minds of the natives. Many later observations confirmed this impression. What a different state of things exists in Java and Singapore! The reason, however, is easily explained.

The Dutch are as little able as the English to acclimatize themselves in tropical countries. They get all they can out of countries in which they are only temporary sojourners, the former by forced service and monopoly, the latter by commerce. In both cases, however, the end is accomplished by comparatively few individuals, whose official position and the largeness of whose undertakings place them far above the mass of the population. In Java, moreover, the Europeans constitute the governing classes, the natives the governed; and even in Singapore where both races are equal before the law the few white men understand how to mark the difference of race so distinctively that the natives without demur surrender to them, though not by means of the law, the privileges of a higher caste. The difference of religion does but widen the gap; and, finally, every European there speaks the language of the country; while the natives are totally ignorant of that spoken by the foreigners.

The Dutch officials are educated at home in schcols specially devoted to the East Indian service. The art of managing the natives, the upholding of prestige, which is considered the secret of the Dutch power over the numerous native populations, forms an essential particular in their education. The Dutch, therefore, manage their intercourse with the natives, no matter how much they intend to get out of them, in strict accordance with customary usage ( $a d a t$ ); they never wound the natives' amor propio and never expose themselves in their own mutual intercourse, which remains a sealed book to the inhabitants.

Things are different in the Philippines. With the exception of those officials whose stay is limited by the rules of the service, or by the place-hunting that ensues at every change in the Spanish ministry, few Spaniards who have once settled in the colony ever return home. It is forbidden to the priests, and most of the rest have no means of doing so. A considerable portion of them consist of subaltern officers, soldiers, sailors, political delinquents and refugees whom the mothercountry has got rid of; and not seldom of adventurers deficient both in means and desire for the journey back, for their life in the colony is far pleasanter than that they were forced to lead in Spain. These latter arrive without the slightest knowledge of the country and without being in the least prepared for a sojourn there. Many of them are so lazy that they won't take the trouble to learn the language even if they marry a daughter of the soil. Their servants understand Spanish, and clandestinely watch the conversation and the actions, and become acquainted with all the secrets, of their indiscreet masters, to whom the Filipinos remain an enigma which their conceit prevents them attempting to decipher.

Spanish lack of prestige deserved.

Social standing of Filipinos thus enhanced.

SpanishFilipino bonds of union.

Latin races
better for colonists in the tropics.

It is easy to understand how Filipino respect for Europeans must be diminished by the numbers of these uneducated, improvident, and extravagant Spaniards, who, no matter what may have been their position at home, are all determined to play the master in the colony. The relative standing of the Filipinos naturally profits by all this, and it would be difficult to find a colony in which the natives, taken all in all, feel more comfortable than in the Philippines. They have adopted the religion, the manners, and the customs of their rulers; and though legally not on an equal footing with the latter, they are by no means separated from them by the high barriers with which, not to mention Java, the churlish reserve of the English has surrounded the natives of the other colonies.

The same religion, a similar form of worship, an existence intermixed with that of the indigenous population, all tend to bring the Europeans and the Indians together. That they have done so is proved by the existence of the proportionately very numerous band of mestizos who inhabit the Islands.

The Spaniards and the Portuguese appear, in fact, to be the only Europeans who take root in tropical countries. They are capable of permanent and fruitful amalgamation* with the natives. $\dagger$

[^27]The want of originality, which among the mestizos, appears to arise from their equivocal position, is also to be found among the natives. Distinctly marked national customs, which one would naturally expect to find in such an isolated part of the world, are sought for in vain, and again and again the stranger remarks that everything has been learned and is only a veneer.

As Spain forcibly expelled the civilization of the Moors, and in Peru that of the Incas, so in the Philippines it has understood how to set aside an equally wellfounded one, by appropriating in an incredible manner, in order to take root itself the more quickly, all existing forms and abuses.*

The uncivilized inhabitants of the Philippines quickly adopted the rites, forms, and ceremonies of the strange religion, and, at the same time, copied the personal externalities of their new masters, learning to despise their own manners and customs as heathenish and barbarian. Nowadays, forsooth, they sing Andalusian songs, and dance Spanish dances; but in what sort of way? They imitate everything that passes before their eyes without using their intelligence to appreciate it. It is this which makes both themselves and their artistic productions wearisome, devoid of character, and, I may add, unnatural, in spite of the skill and patience they devote to them. These two peculiarities, moreover, are invariably to be found amongst nations whose civilization is but little developed; the patience so much admired is often nothing but waste of time and breath, quite

[^28]Imitation instilied and self-respect banished.
1nitiative and individuality missing.

A compromise civilization.
out of proportion to the end in view, and the skill is the mere consequence of the backward state of the division of labor.

Educated Filipino unnatural.

Native art-sense spoiled.

Indolence from absence of incentive.

If I entered the house of a well-to-do Filipino, who spoke Spanish, I was received with the same phrases his model, a Spaniard, would employ; but I always had the feeling that it was out of place. In countries where the native population remains true to its ancient customs this is not the case; and whenever I have not been received with proper respect, I have remarked that the apparent fact proceeded from a difference in social forms, not more to be wondered at than a difference in weights and measures. In Java, and particularly in Borneo and the Moluccas, the utensils in daily use are ornamented with so refined a feeling for form and color, that they are praised by our artists as patterns of ornamentation and afford a proof that the labor is one of love, and that it is presided over by an acute intelligence. Such a sense of beauty is seldom to be met with in the Philippines. Everything there is imitation or careless makeshift. Even the piña embroideries, which are fabricated with such wonderful patience and skill, and are so celebrated for the fineness of the work, are, as a rule, spiritless imitations of Spanish patterns. One is involuntarily led to these conclusions by a comparison of the art products of the Spanish-American communities with those of more barbarous races. The Berlin Ethnographical Museum contains many proofs of the facts I have just mentioned.

The oars used in the Philippines are usually made of bamboo poles, with a board tied to their extremities with strips of rattan. If they happen to break, so much the better; for the fatiguing labor of rowing must necessarily be suspended till they are mended again.

In Java the carabao-carts, which are completely covered in as a protection against the rain, are ornamented with many tasteful patterns. The roofless wagons used in the Philippines are roughly put together at the last moment. When it is necessary to protect their contents from the wet, an old pair of mats is thrown over them, more for the purpose of appeasing the prejudices of the "Castilians" than really to keep off the rain.

The English and the Dutch are always looked upon as strangers in the tropics; their influence never touches the ancient native customs which culminate in the religion of the country. But the populations whom the Spaniards have converted to their religion have lost all originality, all sense of nationality; yet the alien religion has never really penetrated into their inmost being, they never feel it to be a source of moral support, and it is no accidental coincidence that they are all more or less stamped with a want of dignity

With the exception of this want of national individuality, and the loss of the distinguishing manners and customs which constitute the chief charm of most eastern peoples, the Filipino is an interesting study of a type of mankind existing in the easiest natural conditions. The arbitrary rule of their chiefs, and the iron shackles of slavery, were abolished by the Spaniards shortly after their arrival; and peace and security reigned in the place of war and rapine. The Spanish rule in these Islands was always a mild one, not because the laws, which treated the natives like children, were wonderfully gentle, but because the causes did not exist which caused such scandalous cruelties in Spanish America and in the colonies of other nations.

It was fortunate for the Filipinos that their islands possessed no wealth in the shape of precious metals or valuable spices. In the earlier days of maritime traffic

Carelessness from lack of responsibility.

Weakened character and want of dignitu

Spanish rule not benevolent, but beneficial.

Circumstarces have favored the Filipinos.
there was little possibility of exporting the numerous agricultural productions of the colony; and it was scarcely worth while, therefore, to make the most of the land. The few Spaniards who resided in the colony found such an easy method of making money in the commerce with China and Mexico, by means of the galleons, that they held themselves aloof from all economical enterprises, which had little attraction for their haughty inclinations, and would have imposed the severest labor on the Filipinos. Taking into consideration the wearisome and dangerous navigation of the time, it was, moreover, impossible for the Spaniards, upon whom their too large possessions in America already imposed an exhausting man-tax, to maintain a strong armed force in the Philippines. The subjection, which had been inaugurated by a dazzling military exploit, was chiefly accomplished by the assistance of the friar orders, whose missionaries were taught to employ extreme prudence and patience. The Philippines were thus principally won by a peaceful conquest.

Have fared better than the Mexicans.

A land of opportunity.

The taxes laid upon the peoples were so trifling that they did not suffice for the administration of the colony. The difference was covered by yearly contributions from Mexico. The extortions of unconscientious officials were by no means conspicuous by their absence. Cruelties, however, such as were practised in the American mining districts, or in the manufactures of Quito, never occurred in the Philippines.
Uncultivated land was free, and was at the service of any one willing to make it productive; if, however, it remained untilled for two years, it reverted to the crown.*

[^29]The only tax which the Filipinos pay is the poll-tax, Low taxes. known as the tributo, which originally, three hundred years ago, amounted to one dollar for every pair of adults, and in a country where all marry early, and the sexes are equally divided, really constituted a familytax. By degrees the tribute has been raised to two and one-sixteenth dollars. An adult, therefore, male or female, pays one and one-thirty-second dollar, and that from his sixteenth to his sixtieth year. Besides this, every man has to give forty days' labor every year to the State. This vassalage (polos y servicios) is divided into ordinary and extraordinary services: the first consists of the duties appertaining to a watchman or messenger, in cleaning the courts of justice, and in other light labors; the second in road-making, and similar heavier kinds of work, for the benefit of villages and provinces. The little use, however, that is made of these services, is shown by the fact that any one can obtain a release from them for a sum which at most is not more than three dollars. No personal service is required of women. A little further on, important details about the tax from official sources, which were placed at my disposal in the colonial office, appear in a short special chapter.

In other countries, with an equally mild climate, and an equally fertile soil, the natives, unless they had reached

Fortunate factors. a higher degree of civilization than that of the Philippine Islanders, would have been ground down by native princes, or ruthlessly plundered and destroyed by foreigners. In these isolated Islands, so richly endowed by nature, where pressure from above, impulse from within, and every stimulus from the outside are wanting, the satisfaction of a few trifling wants is sufficient for an existence with ample comfort. Of all countries in the world, the Philippines have the greatest claim to be considered a lotos-eating Utopia. The traveller, whose
knowledge of the dolce far niente is derived from Naples, has no real appreciation of it; it only blossoms under the shade of palm-trees. These notes of travel will contain plenty of examples to support this. One trip across the Pasig gives a foretaste of life in the interior of the country. Low wooden cabins and bamboo huts, surmounted with green foliage and blossoming flowers, are picturesquely grouped with areca palms, and tall, feather-headed bamboos, upon its banks. Sometimes the enclosures run down into the stream itself, some of them being duck-grounds, and others bathing-places. The shore is fringed with canoes, nets, rafts, and fishing apparatus. Heavily-laden boats float down the stream, and small canoes ply from bank to bank between the groups of bathers. The most lively traffic is to be seen in the tiendas, large sheds, corresponding to the Javanese harongs, which open upon the river, the great channel for traffic.

River resorts.

Steeping pilots.
At times somebody may be seen floating down the stream asleep on a heap of coconuts. If the nuts run ashore, the sleeper rouses himself, pushes off with a long bamboo, and contentedly relapses into slumber, as his eccentric raft regains the current of the river. One cut of his bolo-knife easily detaches sufficient of the husk of the nuts to allow of their being fastened together; in this way a kind of wreath is formed which encircles
and holds together the loose nuts piled up in the middle. in this way a kind of wreath is formed which encircles
and holds together the loose nuts piled up in the middle.

Labor-saving conditions.

They are a source of great attraction to the passing sailors, who resort to them for eating, drinking, and other convivialities; and while away the time there in gambling, betel chewing, and smoking, with idle companions of both sexes.

The arduous labors of many centuries have left as their legacy a perfect system of transport; but in these Islands man can obtain many of his requirements direct
with proportionately trifling labor, and a large amount of comfort for himself.

Off the Island of Talim, in the great Lagoon of Bay, my boatmen bought for a few cuartos several dozens of fish quite twelve inches long; and those which they couldn't eat were split open, salted, and dried by a few hours' exposure to the heat of the sun on the roof of the boat. When the fishermen had parted with their contemplated breakfast, they stooped down and filled their cooking-vessels with sand-mussels (paludina costata, 2.a G.), first throwing away the dead ones from the handfuls they picked up from the bottom of the shallow water.

Nearly all the dwellings are built by the water's edge. The river is a natural self-maintaining highway, on which

River's importance loads can be carried to the foot of the mountains. The huts of the people, built upon piles, are to be seen thickly scattered about its banks, and particularly about its broad mouths. The appropriateness of their position is evident, for the stream is at once the very center of activity and the most convenient spot for the pursuit of their callings. At each tide the takes of fish are more or less plentiful, and at low-water the women and children may be seen picking up shell-fish with their toes, for practice has enabled them to use their toes as deftly as their fingers, or gathering in the sand-crabs and eatable seaweed.

The riverside is a pretty sight when men, women, and children are bathing and frolicking in the shade of the

Riverside gaiety. palm-trees; and others are filling their water-vessels, large bamboos, which they carry on their shoulders, or jars, which they bear on their heads; and when the boys are standing upright on the broad backs of the carabaos and riding triumphantly into the water.

Coco-palms.

The carabao.

It is here too that the coco-palm most flourishes, a tree that supplies not only their food and drink, but also every material necessary for the construction of huts and the manufacture of the various articles which they use. While the greatest care is necessary to make those growing further inland bear even a little fruit, the palmtrees close to the shore, even when planted on wretched soil, grow plentiful crops without the slightest trouble. Has a palm-tree ever been made to blossom in a hothouse? Thomson* mentions that coco-trees growing by the sea-side are wont to incline their stems over the ocean, the waters of which bear their fruit to desert shores and islands, and render them habitable for mankind. Thus the coco-tree would seem to play an essential part in the ocean vagabondage of Malaysia and Polynesia.

Close to the coco-trees grow clumps of the stunted nipa-palms, which only flourish in brackish waters; $\dagger$ their leaves furnish the best roof-thatching. Sugar, brandy, and vinegar are manufactured from their sap. Three hundred and fifty years ago Pigafetta found these manufactures in full swing, but nowadays they seem to be limited to the Philippines. Besides these, the pan-danus-tree, from the leaves of which the softest mats are woven, is always found in near proximity to the shore.
Towards the interior the landscape is covered with rice-fields, which ycarly receive a fresh layer of fertile soil, washed down from the mountains by the river, and spread over their surface by the overflowing of its waters; and which in consequence never require any fertilizer. The carabao, the favorite domestic animal of the Malays, and which they keep especially for agri-

[^30]cultural purposes, prefers these regions to all others. It loves to wallow in the mud, and is not fit for work unless permitted to frequent the water.

Bamboos with luxuriant leafy tops grow plentiful'y Bambon. by the huts in the rice-fields which fringe the banks of the river. In my former sketches of travel I have endeavored to describe how much this gigantic plant contributes to the comfort and convenience of tropical life. Since then I have become acquainted with many curious purposes to which it is turned, but to describe them here would be out of place.* I may be allowed, however, to briefly cite a few examples showing what numerous results are obtained from simple means. Nature has endowed these splendid plants, which perhaps surpass all others in beauty, with so many useful qualities, and delivered them into the hands of mankind so ready for immediate use, that a few sharp cuts suffice to convert them into all kinds of various utensils. The bamboo possesses, in proportion to its lightness, an Strength. extraordinary strength; the result of its round shape, and the regularity of the joints in its stem. The parallel position and toughness of its fibers render it easy to split, and, when split, its pieces are of extraordinary pliability and elasticity. To the gravelly soil on which it grows it owes its durability, and its firm, even, and always clean surface, the brilliancy and color of which improve by use. And finally, it is a great thing for a population with such limited means of conveyance Convenience. that the bamboo is to be found in such abundance in all kinds of localities and of all dimensions, from a few millimeters to ten or fifteen centimeters in diameter, even

[^31]sometimes to twice this amount; and that, on account of its unsurpassed floating power, it is pre-eminently fitted for locomotion in a country poor in roads but rich in watercourses. A blow with a bolo is generally enough to cut down a strong stem. If the thin joints are taken away, hollow stems of different thicknesses can be slid into one another like the parts of a telescope. From bamboos split in half, gutters, troughs, and roofing tiles can be made. Split into several slats, which can be again divided into small strips and fibers for the manufacture of baskets, ropes, mats, and fine plaiting work, they can be made into frames and stands. Two cuts in the same place make a round hole through which a stem of corresponding diameter can be firmly introduced. If a similar opening is made in a second upright, the horizontal stem can be run through both. Gates, closing perpendicularly or horizontally in frames moving without friction on a perpendicular or horizontal axis, can be made in this way.

Two deep cuts give an angular shape to the stem; and when its two sides are wide enough apart to admit of a cross-stem being placed between them, they can be employed as roof-ridges or for the framework of tables and chairs; a quantity of flat split pieces of bamboo being fastened on top of them with chair-cane. These split pieces then form the seats of the chairs and the tops of the tables, instead of the boards and large bamboo laths used at other times. It is equally easy to make an oblong opening in a large bamboo in which to fit the laths of a stand.

A couple of cuts are almost enough to make a fork, a pair of tongs or a hook.

If one makes a hole as big as the end of one's finger in a large bamboo close under a joint, one obtains by fastening a small piece of cloth to the open end, a syphon
or a filter. If a piece of bamboo is split down to the joint in strips, and the strips be bound together with others horizontally interlaced, it makes a conical basket. If the strips are cut shorter, it makes a peddler's pack basket. If a long handle is added, and it is filled with tar, it can be used as a signal torch. If shallower baskets of the same dimensions, but with their bottoms cut off or punched out, are placed inside these conical ones, the two together make capital snare baskets for crabs and fish. If a bamboo stem be cut off just below the joint, and its lower edge be split up into a cogged rim, it makes, when the partition of the joint is punched out, an earth-auger, a fountain-pipe, and many things of the kind.

Strangers travelling in the interior have daily fresh opportunities of enjoying the hospitality of nature.

Pleasures of travel. The atmosphere is so equitably warm that one would gladly dispense with all clothing except a sun-hat and a pair of light shoes. Should one be tempted to pass the night in the open air, the construction of a hut from the leaves of the palm and the fern is the work of a few minutes; but in even the smallest village the traveller finds a "common house" (casa real), in which he can take up his quarters and be supplied with the necessaries of life at the market price. There too he will always meet with semaneros (those who perform menial duties) ready to serve him as messengers or porters for the most trifling remuneration. But long practice has taught me that their services principally consist in doing nothing. On one occasion I wanted to send a man who was playing cards and drinking tuba (fresh or weakly-fermented palm-sap) with his companions, on an errand. Without stopping his game the fellow excused himself on the ground of being a prisoner, and

Pleasant prison life.

Frequent floggings little regarded.

Change from Malayan character.
one of his guardians proceeded in the midst of the intense heat to carry my troublesome message. Prisoners have certainly little cause to grumble. The only inconvenience to which they are exposed are the floggings which the local authorities very liberally dispense by the dozens for the most trifling offences. Except the momentary bodily pain, however, these appear in most cases to make little impression on a people who have been accustomed to corporal punishment from their youth upwards. Their acquaintances stand round the sufferers, while the blows are being inflicted, and mockingly ask them how it tastes.

A long residence amongst the earnest, quiet, and dignified Malays, who are most anxious for their honor, while most submissive to their superiors, makes the contrast in character exhibited by the natives of the Philippines, who yet belong to the Malay race, all the more striking. The change in their nature appears to be a natural consequence of the Spanish rule, for the same characteristics may be observed in the natives of Spanish America. The class distinctions and the despotic oppression prevalent under their former chiefs doubtless rendered the Filipinos of the Fast more like the Malays of today.

## V

The familiar field jor travellers.

The environs of Manila, the Pasig, and the Lagoon of Bay, which are visited by every fresh arrival in the colony, have been so often described that I have restricted myself to a few short notes upon these parts of the country, and intend to relate in detail only my excursions into the south-eastern provinces of Luzon, Camarines, and Albay, and the islands which lie to the east of them,

Samar and Leyte. Before doing this, however, it will not be out of place to glance at the map and give some slight description of their geographical conditions.

The Philippine Archipelago lies between Borneo and Formosa, and separates the northern Pacific Ocean from the China Sea. It covers fourteen and one-half degrees of latitude, and extends from the Sulu Islands in the south, in the fifth parallel of north latitude, to the Babuyans in the north in latitude $19^{\circ} 30^{\prime}$. If, however, the Bashee or Batanes Islands be included, its area may be said to extend to the twenty-first parallel of north latitude. But neither southwards or northwards does Spanish rule extend to these extreme limits, nor, in fact, does it always reach the far interior of the larger isiands. From the eastern to the western extremity of the Philippines the distance is about nine degrees of longitude. Two islands, Luzon, with an area of two thousand, and Mindanao, with one of more than one thousand five hundred square miles, are together larger than all the rest. The seven next largest islands are Palawan, Samar, Panay, Mindoro, Leyte, Negros, and Cebụ; of which the first measures about two hundred and fifty, and the last about one hundred square miles. Then come Bohol and Masbate, each about half the size of Cebu; twenty smaller islands, still of some importance; and numerous tiny islets, rocks, and reefs.

The Philippines are extremely favored by their position and conditions. Their extension from north to south, over $16^{\circ}$ of latitude, obtains for them a variety of climate which the Dutch Indies, whose largest diameter, their extent in latitude north and south of the equator being but trifling, runs from the east to the west, by no means enjoy. The advantages accruing from their neighborhood to the equator are added to those

Archipelajo's great extent.
20
acquired from the natural variety of their climate; and the produce of both the torrid and temperate zones, the palm-tree and the fir, the pine-apple, the corn ear

Harbors and water highways.

Soil and sea alike productive. and the potato, flourish side by side upon their shores.

The larger islands contain vast inland seas, considerable navigable rivers, and many creeks running far into the interior; they are rich, too, in safe harbors and countless natural ports of refuge for ships in distress. Another attribute which, though not to be realized by a glance at the map, is yet one of the most fortunate the Islands possess, is the countless number of small streams which pour down from the inland hills, and open out, ere they reach the ocean, into broad estuaries; up these watercourses coasting vessels of shallow draught can sail to the very foot of the mountains and take in their cargo. The fertility of the soil is unsurpassed; both the sea around the coasts and the inland lakes swarm with fish and shell-fish, while in the whole archipelago there is scarcely a wild beast to be found. It seems that only two civets happen to appear: Miro (paradoxurus philippinensis Tem.) and galong (viverra tangalunga Gray). Luzon surpasses all the other islands, not only in size, but in importance; and its fertility and other natural superiority well entitle it to be called, as it is by Crawfurd, "the most beautiful spot in the tropics."

The mainland of the isle of Luzon stretches itself in a compact long quadrangle, twenty-five miles broad, from $18^{\circ} 40^{\prime}$ north latitude to the Bay of Manila ( $14^{\circ} 30^{\prime}$ ); and then projects, amid large lakes and deep creeks, a rugged promontory to the east, joined to the main continent by but two narrow isthmuses which stretch east and west of the large inland Lagoon of Bay. Many traces of recent upheavals betoken that the two portions were once separated and formed two distinct islands. The large eastern promontory, well-nigh as long as the
northern portion, is nearly cut in half by two deep bays, which, starting from opposite points on the south-eastern and north-western coasts, almost merge their waters in the center of the peninsula; the Bay of Ragay, and the Bay of Sogod. In fact, the southern portion of Luzon may be better described as two small peninsulas lying next to one another in paralle positions, and joined together by a narrow neck of land scarcely three miles broad. Two small streams which rise nearly in the same spot and pour themselves into the two opposite gulfs, make the separation almost complete, and form at the same time the boundary between the province of Tayabas on the west, and that of Camarines on the east. The western portion, indeed, consists almost entirely of the first-named district, and the eastern is divided into the provinces of North Camarines, South Camarines, and Albay. The first of these three is divided from Tayabas by the boundary already mentioned, and from South Camarines by a line drawn from the southern shore of the Bay of San Miguel on the north to the opposite coast. The eastern extremity of the peninsula forms the province of Albay; separated from South Camarines by a line which runs from Donzol, on the south coast, northwards across the volcano of Mayon, and which then, inclining to the west, reaches the northern shore. A look at the map will make these explanations clearer.

There are two seasons in the Philippines, the wet and The monsomns. the dry. The south-west monsoon brings the rainy season, at the time of our summer, to the provinces which lie exposed to the south and west winds. On the northern and eastern coasts the heaviest downpours take place (in our winter months) during the north-eastern monsoons. The ruggedness of the country and its numerous mountains cause, in certain districts, many. variations in these normal meteorological conditions.

The dry season lasts in Manila from November till June (duration of the north-east monsoon); rain prevails during the remaining months (duration of the southwest monsoon). The heaviest rainfall occurs in September; March and April are frequently free from rain. From October to February inclusively the weather is cool and dry (prevalence of N.W., N., and N.E. winds); March, April, and May are warm and dry (prevalence of E.N.E., E., and E.S.E. winds); and from June till the end of September it is humid and moderately warm.

There has been an observatory for many years past in Manila under the management of the Jesuits. The following is an epitome of the yearly meteorological report for 1867, for which I am indebted to Professor Dove:

Barometrical readings.-The average height of the mercury was, in 1867, 755.5 ; in 1865, 754.57 ; and in 1866, 753.37 millimeters.

In 1867 the difference between the highest and lowest barometrical readings was not more than 13.96 millimetres, and would have been much less if the mercury had not been much depressed by storms in July and September. The hourly variations amounted to very few millimeters.

Daily reading of the barometer.-The mercury rises in the early morning till about $9 \mathrm{a} . \mathrm{m}$., it then falls up to 3 or $4 \mathrm{p} . \mathrm{m}$., from then it rises again till $9 \mathrm{p} . \mathrm{m}$. , and then again falls till towards day-break. Both the principal atmospheric currents prevalent in Manila exercise a great influence over the mercury in the barometer; the northern current causes it to rise (to an average height of 756 millimeters), the southern causes it to fall (to about 753 millimeters).

Temperature.-The heat increases from January till the end of May, and then decreases till December.

Average yearly temperature, $27.9^{\circ} \mathrm{C}$. The highest temperature ever recorded (on the 15th of April at 3 p. m.) was $37.7^{\circ} \mathrm{C}$.; the lowest (on the 14 th of December and on the 30th of January at $6 \mathrm{a} . \mathrm{m}$.), $19.4^{\circ} \mathrm{C}$. Difference, $18.3^{\circ} \mathrm{C}$.*

Thermometrical variations.-The differences between the highest and lowest readings of the thermometer were, in January, $13.9^{\circ}$; in February, $14.2^{\circ}$; in March, $15^{\circ}$; in April, $14.6^{\circ}$; in May, $11.1^{\circ}$; in June, $9.9^{\circ}$; in July, $9^{\circ}$; in August, $9^{\circ}$; in September, $10^{\circ}$; in October, $11.9^{\circ}$; in November, $11.8^{\circ}$; and in December, $11.7^{\circ}$.

Coolest months.-November, December and January, with northerly winds.

Hottest months.-April and May. Their high temperature is caused by the change of monsoon from the northeast to the south-west. The state of the temperature is most normal from June to September; the variations are least marked during this period owing to the uninterrupted rainfall and the clouded atmosphere.

Daily variations of the thermometer.-The coolest portion of the day is from 6 to $7 \mathrm{a} . \mathrm{m}$.; the heat gradually increases, reaches its maximum about 2 or 3 p . m., and then again gradually decreases. During some hours of the night the temperature remains unchanged, but towards morning it falls rapidly.

The direction of the wind is very regular at all seasons winds of the year, even when local causes make it vary a little. In the course of a twelvemonth the wind goes around the whole compass. In January and February north winds prevail; in March and April they blow from the southeast; and in May, June, July, August, and September,

[^32]from the south-west. In the beginning of October they vary between south-east and south-west, and settle down towards the close of the month in the north-east, in which quarter they remain tolerably fixed during the two following months. The two changes of monsoon always take place in April and May, and in October. As a rule, the direction of both monsoons preserves its equilibrium; but in Manila, which is protected towards the north by a high range of hills, the north-east monsoon is often diverted to the south-east and north-west. The same cause gives greater force to the south-west wind.

Sunshine and rain.

Storms.

The sky is generally partially clouded; entirely sunny days are of rare occurrence, in fact, they only occur from January to April during the north-east monsoons. Number of rainy days in the year, 168. The most continuous and heaviest rain falls from June till the end of October. During this period the rain comes down in torrents; in September alone the rainfall amounted to 1.5 meters, nearly as much as falls in Berlin in the course of the whole year, $3,072.8$ millimeters of rain fell in the twelve month; but this is rather more than the average.

The evaporation only amounted to $2,307.3$ millimeters; in ordinary years it is generally about equal to the downfall, taking the early averages, not those of single months.

The average daily evaporation was about 6.3 millimeters.

The changes of monsoons are often accompanied with tremendous storms; during one of these, which occurred in September, the velocity of the wind was as much as thirty-seven or thirty-eight meters per second. An official report of the English vice-consul mentions a typhoon which visited the Islands on September 27, 1865, and which did much damage at Manila, driving seventeen vessels ashore.

The Philippines are divided into provinces ( P ), and districts (D), each of which is administered by an alcalde of the 1st (A1), 2nd (A2), or 3rd class (A3) (de termino, de ascenso, de entrada); by a political and military governor (G), or by a commandant (C). In some provinces an alcalde of the 3rd class is appointed as coadjutor to the governor. These divisions are frequently changed.

The population is estimated approximately at about five millions.

In spite of the long possessions of the Islands by the Spaniards their language has scarcely acquired any footing there. A great diversity of languages and dialects prevails; amongst them the Bisayan, Tagalog, Ilocano, Bicol, Pangasinan, and Pampangan are the most important.

ISLAND OF LUZON

| Rank of |  | Name | Prevailing Dialect | Popula- <br> tion | $\begin{aligned} & \text { g } \\ & \stackrel{0}{9} \\ & \stackrel{y}{2} \\ & \dot{\sim} \end{aligned}$ | and their languages and populations. |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| .. 會 O | $\begin{aligned} & \stackrel{\rightharpoonup}{E} \\ & \stackrel{H}{0} \\ & \ddot{\theta} \end{aligned}$ |  |  |  |  |  |
| $\begin{aligned} & \text { G. } \\ & \text { A1. } \\ & \text { A2. } \\ & \text { A1. } \end{aligned}$ | P . | Abra. | Ilocano. |  |  |  |
|  | P P. | Albay.. | Bicol................. | 330,121 | 34 |  |
|  | P P. | Bataan. Batangas | Tagalog, Pampangan | 44,794 280,100 | 10 |  |
|  | $\stackrel{\mathrm{D}}{\mathrm{D}}$. | Batangas | Tagalog, . . . . . . . . . . . . | 280,100 8,465 7 |  |  |
|  | D. | Bontoc. | Suflin, Ilocano, Igorot. . . . . | 7,052 |  |  |
| A1.$\mathrm{A} 1$ | P. | Bulacan. | Tagalog.... | 240,341 | 23 |  |
|  | P. | Cagayan. . . . . . | Ibanag, Itanes, Idayan, Gaddan, Ilocano, Dadaya, Apayao, Malaneg. | 64,437 | 16 |  |
| A2. | P. | Camarines Norte. | Tagalog, Bicol. . . . . . . . . . . . . . . | 26,372 | 7 |  |
| A2 (?) | P. | Camarines Sur. | Bicol. | 81,047 | 31 |  |
| A3. | P . | Cavite .... | Spanish, Tagalog. | 109,501 | 17 |  |
| A1. | P P. | Ilocos Norte. | Ilocano, Tinguian | 134,767 105,251 | 12 |  |
| ${ }_{\text {A1. }}$ C. | $\stackrel{\mathrm{P}}{\mathrm{D}} \mathrm{P}$. | Ilocos Sur. . | Tacano. | 105,251 | 18 2 |  |
| G. | P. | Isabela. | Ibanag, Gaddan, Tagalog | 29,200 | 9 |  |
| Ai. | P . | Laguna. | Tagalog, Spanish | 121,251 | 26 |  |
|  | D. | Lepanto | Igorot, Ilocano... ${ }^{\text {a }}$. ${ }^{\text {a }}$ | 8,851 | 48 |  |
| 3 C 1. | $\stackrel{\mathrm{P}}{\mathrm{D}}$. | Manila. | Tagalog, Spanish, Chines | 323,683 44,239 | 12 |  |
| $\stackrel{\text { c. }}{ }$ 2. | D. | Morong.. | Tagalog. . . . . . . . . . | 44,239 | 12 |  |
|  | P. | Nueva Ecija. . . . | Tagalog, Pangasinan, Pampangan, Ilocano | 84,520 | 12 |  |
| A3. | P. | Nueva Vizcaya. . | Gaddan, Ifugao, Ibilao, Ilongote. | 32,961 | 8 |  |
| ${ }_{\text {Al }}{ }^{\text {a }}$. | P. | Pampanga....... | Pampangan, Ilocano. . . . . . . . . . | 193,423 | 24 |  |
| A1. | P. | Pangasinan Porac..... | Pangasinan, Ilocano. | 263,472 | 26 |  |
| C. | D. | Porac. Principe | $\xrightarrow{\text { Pampangan.............. }}$ | 6,950 3,609 | 1 |  |
|  | ${ }_{\text {D }}$ D. | Saltan. | Gagdog, Mocano, Iongote | 6,640 |  |  |
| A2. | P. | Tayabas. | Tagalog, Bicol. | 93,918 | 17 |  |
|  | D. | Tiagan.. | Different Igorot dialects | 5,723 |  |  |
| G. <br> A2. | P. | Union. | Ilocano. . . . . . . . . . . . . . . . . . | 88,024 | 11 |  |
|  | P. | Zambales | Zambal, Ilocano, Acta, Pampangan, Tagalog, Pangasinan | 72,936 | 15 |  |

Provinces and district.

Language and dialects.
.

Bisayas.

Mindanao.

Oullying islands.

Unreliability of government reports.

ISLANDS BETWEEN LUZON AND MINDANAO


## MINDANAO

|  | D. | Cotaba | Spanish, Man | 1,103 |  |
| :---: | :---: | :---: | :---: | :---: | :---: |
| G a3. | D. | Misamis (J) | Bisayan. | 63,639 | 14 |
| G a3. | D. | Surigao (J) |  | 24,104 | 12 |
|  | D. | Zamboanga | Mandaya, Spanish | 9,608 | 2 |
| G a3. | D. | Davao.... | Bisayan... | 1,537 |  |



The statistics of the above table are taken from a small work, by Sr. [Vicent $\epsilon$ ] Barrantes, the Secretary-General of the Philippines; but I have arranged them differently to render them more easily intelligible to the eye. Although Sr. Barrantes had the best official materials at his disposal, too much value must not be attributed to his figures, for the sources from which he drew them are tainted with errors to an extent that can hardly be realized in Europe. For example, he derives the following contradictory statements from his official sources:-The population of Cavite is set down as 115,300 and 65,225 ; that of Mindoro as 45,630 , and 23,054 ; that of Manila as 230,443, and 323,683; and that of Capiz as 788,947 , and 191,818 .

## VI

My first excursion was to the province of Bulacan, on to Bulacan the northern shore of the Bay of Manila. A couple ${ }^{\text {by steamer. }}$ of hours brought the steamer to the bar of Binuanga (not Bincanga as it is called in Coello's map), and a third to Bulacan, the capital of the province, situated on the flat banks of an influent of the Pampanga delta. I was the only European passenger, the others were composed of Tagalogs, mestizos, and a few Chinese; the first more particularly were represented by women, who are generally charged with the management of all business affairs, for which they are much better fitted than the men. As a consequence, there are usually more women than men seen in the streets, and it appears to be an admitted fact that the female births are more numerous than the male. According, however, to the church-record which I looked through, the reverse was, at any rate in the eastern provinces, formerly the case.

At the landing-place a number of carromatas were Carromata. waiting for us,-brightly painted, shallow, two-wheeled boxes, provided with an awning, and harnessed to a couple of horses, in which strangers with money to spend are quickly driven anywhere they may desire.

The town of Bulacan contains from 11,000 to 12,000 inhabitants; but a month before my arrival, the whole

Town of Bulacan. of it, with the exception of the church and a few stone houses, had been burnt to the ground. All were therefore occupied in building themselves new houses, which, oddly enough, but very practically, were commenced at the roof, like houses in a drawing. Long rows of roofs composed of palm-leaves and bamboos were laid in readiness on the ground, and in the meantime were used as tents.

Frequence of fires.

To Calumpit by carriage.

Similar destructive fires are very common. The houses, which with few exceptions are built of bamboo and wood, become perfectly parched in the hot season, dried into so much touchwood by the heat of the sun. Their inhabitants are extremely careless about fire, and there are no means whatever of extinguishing it. If anything catches fire on a windy day, the entire village, as a rule, is utterly done for. During my stay in Bulacan, the whole suburb of San Miguel, in the neighborhood of Manila, was burnt dowin, with the exception of the house of a Swiss friend of mine, which owed its safety to the vigorous use of a private fire-engine, and the intermediation of a small garden full of bananas, whose stems full of sap stopped the progress of the flames.

I travelled to Calumpit, a distance of three leagues, in the handsome carriage of an hospitable friend. The roads were good, and were continuously shaded by fruittrees, coco and areca palms. The aspect of this fruitful province reminded me of the richest districts of Java; but the pueblos here exhibited more comfort than the desas there. The houses were more substantial; numerous roomy constructions of wood, in many cases, even, of stone, denoted in every island the residence of official and local magnates. But while even the poorer Javanese always give their wicker huts a smart appearance, border the roads of their villages with blooming hedges, and display everywhere a sense of neatness and cleanliness, there were here far fewer evidences of taste to be met with. I missed too the alun-alun, that pretty and carefully tended open square, which, shaded by waringa trees, is to be met with in every village in Java. And the quantity and variety of the fruit trees, under whose leaves the desas of Java are almost hidden, were by no means as great in this province, although it is the garden of the Philippines, as in its Dutch prototype.

I reached Calumpit towards evening, just as a proces- Calumpit. sion, resplendent with flags and torches, and melodious with song, was marching round the stately church, whose worthy priest, on the strength of a letter of introduction from Madrid, gave me a most hospitable reception. Calumpit, a prosperous place of 12,250 inhabitants, is situated at the junction of the Quingua and Pampanga rivers, in an extremely fruitful plain, fertilized by the frequent overflowing of the two streams.

About six leagues to the north-west of Calumpit, Mt. Araynt. Mount Arayat, a lofty, isolated, conical hill, lifts its head. Seen from Calumpit, its western slope meets the horizon at an angle of $20^{\circ}$, its eastern at one of $25^{\circ}$; and the profile of its summit has a gentle inclination of from $4^{\circ}$ to $5^{\circ}$.

At Calumpit I saw some Chinese catching fish in a peculiar fashion. Across the lower end of the bed of a brook which was nearly dried up, and in which there were only a few rivulets left running, they had fastened a hurdle of bamboo, and thrown up a shallow dam behind it. The water which collected was thrown over the dam with a long-handled winnowing shovel. The shovel was tied to a bamboo frame work ten feet high, the elasticity of which made the work much easier. As soon as the pool was emptied, the fisherman was easily able Picking fist. to pick out of the mud a quantity of small fish (Ophiocephalus vagus). These fishes, which are provided with peculiar organisms to facilitate respiration, at any rate, enabling them to remain for some considerable time on dry land, are in the wet season so numerous in the ditches, ponds, and rice-fields, that they can be killed with a stick. When the water sinks they also retire, or, according to Professor Semper, bore deeply into the ooze at the bottom of the watercourses, where, protected by a hard crust of earth from the persecutions of mankind,
they sleep away the winter. This Chinese method of fishing seems well adapted to the habits of the fish. The circumstances that the dam is only constructed at the lower end of the watercourse, and that it is there that the fish are to be met with in the greatest numbers, seem to indicate that they can travel in the ooze, and that as the brooks and ditches get dried up, they seek the larger water channels.

Following the Quingua in its upward and eastward course as it meandered through a well-cultivated and luxuriantly fertile country, past stone-built churches and chapels which grouped themselves with the surrounding palm-trees and bamboo-bushes into sylvan vignettes, Father Llano's four-horsed carriage brought me to the important town of Baliwag, the industry of which is celebrated beyond the limits of the province.

I visited several families and received a friendly reception from all of them. The houses were built of boards and were placed upon piles elevated five feet above the ground. Each consisted of a spacious dwelling apartment which opened on one side into the kitchen, and on the other on to an open space, the azotea; a lofty roof of palm-trees spread itself above the dwelling, the entrance to which was through the azotea. The latter was half covered by the roof I have just mentioned. The floor was composed of slats an inch in width, laid half that distance apart. Chairs, tables, benches, a cupboard, a few small ornaments, a mirror, and some lithographs in frames, composed the furniture of the interior. The cleanliness of the house and the arrangement of its contents testified to the existence of order and prosperity.

I found the women in almost all the houses occupied in weaving tapis, which have a great reputation in the Manila market. They are narrow, thickly-woven silk
scarves, six varas in length, with oblique white stripes on a dark-brown ground. They are worn above the sarong.
Baliwag is also especially famous for its petaca* cigar-cases, which surpass all others in delicacy of workmanship. They are not made of straw, but of fine strips of Spanish cane, and particularly from the lower ends of the leaf-stalks of the calamusart, which is said to grow only in the province of Nueva Ecija.

A bundle of a hundred selected stalks, a couple of feet long, costs about six reals. When these stalks have been split lengthways into four or five pieces, the inner wood is removed, till nothing but the outer part remains. The thin strips thus obtained are drawn by the hand between a convex block and a knife fixed in a sloping position, and between a couple of steel blades which nearly meet.

It is a task requiring much patience and practice.

I'reparation of material. cases. In the first operation, as a rule, quite one-half of the stems are broken, and in the second more than half, so that scarcely twenty per cent of the stalks survive the final process. In very fine matting the proportionate loss is still greater. The plaiting is done on wooden cylinders. A case of average workmanship, which costs two dollars on the spot, can be manufactured in six days' uninterrupted labor. Cigar-cases of exceptionally intricate workmanship, made to order for a connoisseur, frequently cost upwards of fifty dollars.

Following the Quingua from Baliwag up its stream, we passed several quarries, where we saw the thicklypacked strata of volcanic stone which is used as a building material. The banks of the river are thickly studded with prickly bamboos from ten to twelve feet high.

[^33]The water overflows in the rainy season, and floods the plain for a great distance. Hence the many shells of large freshwater mussels which are to be seen lying on the earth which covers the volcanic deposit. The country begins to get hilly in the neighborhood of Tobog, a small place with no church of its own, and dependent for its services upon the priest of the next parish. The gentle slopes of the hills are, as in Java, cut into terraces and used for the cultivation of rice. Except at Lucban I have never observed similar sawas anywhere else in the Philippines. Several small sugar-fields, which, however, the people do not as yet understand how to manage properly, show that the rudiments of agricultural prosperity are already in existence. The roads are partly covered with awnings, beneath which benches are placed affording repose to the weary traveller. I never saw these out of this province. One might fancy oneself in one of the most fertile and thickly-populated districts of Java.

A convento and the tparish priest.

I passed the night in a convento, as the dwelling of the parish priest is called in the Philippines. It was extremely dirty, and the priest, an Augustinian, was full of proselytish ardor. I had to undergo a long geographical examination about the difference between Prussia and Russia; was asked whether the great city of Nuremberg was the capital of the grand-duchy or of the empire of Russia; learnt that the English were on the point of returning to the bosom of the Catholic Church, and that the "others" would soon follow, and was, in short, in spite of the particular recommendation of Father Llanos, very badly received. Some little time afterwards I fell into the hands of two young Capuchins, who tried to convert me, but who, with the exception of this little impertinence, treated me capitally. They gave me pâtés de foie gras boiled in water, which I quickly
recognized by the truffles swimming about in the grease. To punish them for their importunity I refrained from telling my hosts the right way to cook the pâtés, which I had the pleasure of afterwards eating in the forest, as I easily persuaded them to sell me the tins they had left. These are the only two occasions on which I was subjected to this kind of annoyance during my eighteen months' residence in the Philippines.
The traveller who is provided with a passport is, however, by no means obliged to rely upon priestly hospitality, as he needs must do in many isolated parts of Europe. Every village, every hamlet, has its com-mon-house, called casa real or tribunal, in which he can take up his quarters and be supplied with provisions at the market price, a circumstance that I was not acquainted with on the occasion of my first trip. The traveller is therefore in this respect perfectly independent, at least in theory, though in practice he will often scarcely be able to avoid putting up at the conventos in the more isolated parts of the country. In these the priest, perhaps the only white man for miles around, is with difficulty persuaded to miss the opportunity of housing such a rare guest, to whom he is only too anxious to give up the best bedroom in his dwelling, and to offer everything that his kitchen and cellar can afford. Everything is placed before the guest in such a spirit of sincere and undisguised friendliness, that he feels no obligation, but on the contrary easily persuades himself that he is doing his host a favor by prolonging his stay. Upon one occasion, when I had determined, in spite of an invitation from the padre, to occupy the casa real, just as I was beginning to instal myself, the priest appeared upon the scene with the municipal officials and a band of music which was in the neighborhood pending the preparations for a religious festival.

Kupang tron-foundiy

A negrito iamily.

He made them lift me up, chair and all, and with music and general rejoicing carried me off to his own house.

On the following day I paid a visit to Kupang, an iron-foundry lying to the N.N.E of Angat, escorted by two armed men, whose services I was pressed to accept, as the district had a bad reputation for robberies. After travelling three or four miles in a northerly direction, we crossed the Banauon, at that time a mere brook meandering through shingle, but in the rainy season an impetuous stream more than a hundred feet broad; and in a couple of hours we reached the ironworks, an immense shed lying in the middle of the forest, with a couple of wings at each end, in which the manager, an Englishman, who had been wrecked some years before in Samar, lived with his wife, a pretty mestiza. If I laid down my handkerchief, my pencil, or any other object, the wife immediately locked them up to protect them from the kleptomania of her servants. These poor people, whose enterprise was not a very successful one, had to lead a wretched life. Two years before my visit a band of twenty-seven robbers burst into the place, sacked the house, and threw its mistress, who was alone with her maid at the time, out of the window. She fortunately alighted without receiving any serious hurt, but the maid, whom terror caused to jump out of the window also, died of the injuries she received. The robbers, who turned out to be miners and residents in Angat, were easily caught, and, when I was there, had already spent a couple of years in prison awaiting their trial.

I met a negrito family here who had friendly relations with the people in the iron-works, and were in the habit of exchanging the produce of the forest with them for provisions. The father of this family accompanied me on a hunting expedition He was armed with a bow
and a couple of arrows. The arrows had spear-shaped iron points a couple of inches long; one of them had been dipped into arrow-poison, a mixture that looked like black tar. The women had guitars ( tabaua) similar to those used by the Mintras in the Malay peninsula. They were made of pieces of bamboo a foot long, to which strings of split chair-cane were fastened.*
Upon my return, to avoid spending the night at the wretched convento where I had left my servant with my luggage, I took the advice of my friends at the ironworks and started late, in order to arrive at the priest's after ten o'clock at night; for I knew that the padre shut up his house at ten, and that I could therefore sleep, without offending him, beneath the roof of a wealthy mestizo, an acquaintance of theirs. About half-past ten I reached the latter's house, and sat down to table with the merry women of the family, who were just having their supper. Suddenly my friend the parson made his appearance from an inner room, where with a couple of Augustinian friars, he had been playing cards with the master of the house. He immediately began to compliment me upon my good fortune, "for had you been but one minute later," said he, "you certainly wouldn't have got into the convento."

## VII

My second trip took me up the Pasig to the great Lagoon of Bay. I left Manila at night in a banca, a boat hollowed out of a tree-trunk, with a vaulted roof made of bamboo and so low that it was almost impossible to sit upright under it, which posture, indeed, the bancabuilder appeared to have neglected to consider. A

[^34]bamboo hurdle placed at the bottom of the boat protects the traveller from the water and serves him as a couch. Jurien de la Gravière* compares the banca to a cigar-box, in which the traveller is so tightly packed that he would have little chance of saving his life if it happened to upset. The crew was composed of four rowers and a helmsman; their daily pay was five reals apiece, in all nearly seven pesos, high wages for such lazy fellows in comparison with the price of provisions, for the rice that a hard-working man ate in a day seldom cost more than seven centavos (in the provinces often scarcely six), and the rest of his food (fish and vegetables), only one centavo. We passed several villages and tiendas on the banks in which food was exposed for sale. My crew, after trying to interrupt the journey under all sorts of pretences, left the boat as we came to a village, saying that they were going to fetch some sails; but they forgot to return. At last, with the assistance of the night watchman, I succeeded in hauling them out of some of their friends' houses, where they had concealed themselves. After running aground several times upon the sandbanks, we entered the land and hill-locked Lagoon of Bay, and reached Jalajala early in the morning.

The Pasig forms a natural canal, about six leagues long, between the Bay of Manila and the Lagoon of Bay, a fresh water lake, thirty-five leagues in circumference, that washes the shores of three fertile provinces, Manila, Laguna and Cavite. Formerly large vessels full of cargo used to be able to sail right up to the borders of the lake; now they are prevented by sandbanks. Even flat-bottomed boats frequently run aground on the

[^35]Napindan and Taguig banks.* Were the banks removed, and the stone bridge joining Manila to Binondo replaced by a swing bridge, or a canal made round it, the coasting vessels would be able to ship the produce of the lagoon provinces at the very foot of the fields in which they grow. The traffic would be very profitable, the waters would shrink, and the shallows along the shore might be turned into rice and sugar fields. A scheme of this kind was approved more than thirty years ago in Madrid, but it was never carried into execution. The sanding up of the river has, on the contrary, been increased by a quantity of fish reels, the erection of which has been favored by the Colonial Waterways Board because it reaped a small tax from them.

Jalajala, an estate which occupies the eastern of the two peninsulas which run southward into the lake, is one of the first places visited by strangers. It owes this preference to its beautiful position and nearness to Manila, and to the fantastic description of it by a former owner, De la Gironnière. The soil of the peninsula is volcanic; its range of hills is very rugged, and the watercourses bring down annually a quantity of soil from the mountains, which increases the deposits at their base. The shore-line, overgrown with grass and prickly sen-sitive-plants quite eight feet high, makes capital pasture for carabaos. Behind it broad fields of rice and sugar extend themselves up to the base of the hills. Towards the north the estate is bounded by the thickly-wooded Sembrano, the highest mountain in the peninsula; on the remaining sides it is surrounded with water. With

[^36]the exception of the flat shore, the whole place is hilly and overgrown with grass and clumps of trees, capital pasture for its numerous herds-a thousand carabaos, one thousand five hundred to two thousand bullocks, and from six to seven hundred nearly wild horses. As we were descending one of the hills, we were suddenly surrounded by half-a-dozen armed men, who took us for cattle-thieves, but who, to their disappointment, were obliged to forego their expected chance of a reward.

Los Baños hot springs.

Beyond Jalajala, on the south coast of the Lagoon of Bay, lies the hamlet of Los Baños, so called from a hot spring at the foot of the Makiling volcano. Even prior to the arrival of the Spaniards, the natives used its waters as a remedy,* but they are now very little patronized. The shore of the lake is at this point, and indeed all round its circumference, so flat that it is impossible to land with dry feet from the shallowest canoe. It is quite covered with sand mussels. Northwest of Los Baños there lies a small volcanic lake fringed with thick woods, called Dagatan (the enchanted lagoon of travellers), to distinguish it from Dagât, as the Tagals call the great Lagoon of Bay. I saw nothing of the crocodiles which are supposed to infest it, but we flushed several flocks of wild fowl, disturbed by our invasion of their solitude. From Los Baños I had intended to go to Lupang Puti (white earth), where, judging from the samples shown me, there is a deposit of fine white silicious earth, which is purified in Manila and used as paint. I did not reach the place, as the guide whom I had with difficulty obtained, pretended, after a couple of miles, to be dead beat. From the inquiries

[^37]I made, however, I apprehend that it is a kind of solfatara. Several deposits of it appear to exist at the foot of the Makiling.*

On my return I paid a visit to the Island of Talim,

## Talim island.

 which, with the exception of a clearing occupied by a few miserable huts, is uninhabited and thickly overgrown with forest and undergrowth. In the center of the Island is the Susong-Dalaga (maiden's bosom), a dolerite hill with a beautifully formed crest. Upon the shore, on a bare rock, I found four eggs containing fully developed young crocodiles. When I broke the shells the little reptiles made off.Although the south-west monsoons generally occur later in Jalajala than in Manila, it was already raining
M. de la Gironnière, so hard that I decided to go to Calauan, on the southern shore of the lake, which is protected by Mount Makiling, and does not experience the effect of the rainy monsoons till later in the season. I met M. de la Gironnière in Calauan, the "gentilhomme Breton" who is so well known for telling the most terrible adventures. He had lately returned from Europe to establish a large sugar manufactory. His enterprise, however, was a failure. The house of the lively old gentleman, whose eccentricity had led him to adopt the dress and the frugal habits of the natives, was neither clean or well kept, although he had a couple of friends to assist him in the business, a Scotchman, and a young Frenchman who had lived in the most refined Parisian society.

[^38]Llanura de Imuc. in lava.

There were several small lakes and a few empty volcanic basins on the estate. To the south-west, not very far from the house, and to the left of the road leading to San Pablo, lies the Llanura de Imuc, a valley of dolerite more than a hundred feet deep. Large blocks of basalt enable one to climb down into the valley, the bottom of which is covered with dense growths. The center of the basin is occupied by a neglected coffee plantation laid out by a former proprietor. The density of the vegetation prevented my taking more precise observations. There is another shallower volcanic crater to the north of it. Its soil was marshy and covered with cane and grass, but even in the rainy season it does not collect sufficient water to turn it into a lake. It might, therefore, be easily drained and cultivated. To the south-west of this basin, and to the right of the road to San Pablo, lies the Tigui-mere. From a plain of whitish-grey soil, covered with concentric shells as large as a nut, rises a circular embankment with gentlysloping sides, intersected only by a small cleft which serves as an entrance, and which shows, on its edges denuded of vegetation, the loose rapilli of which the embankment is formed. The sides of this natural amphitheatre tower more than a hundred feet above its flat base. A path runs east and west right through the center. The northern half is studded with cocopalm trees and cultivated plants; the southern portion is full of water nearly covered with green weeds and slime. The ground consists of black rapilli.

From the Tigui-mere I returned to the hacienda along a bank formed of volcanic lava two feet in thickness and covered with indistinct impressions of leaves. Their state of preservation did not allow me to distinguish
their species, but they certainly belonged to some tropical genus, and are, according to Professor A. Braun, of the same kind as those now growing there.

There are two more small lakes half a league to the south-east. The road leading to them is composed of volcanic remains which cover the soil, and large blocks of lava lie in the bed of the stream.

The first of the two, the Maycap Lake, is entirely
Maycap Lake. embanked with the exception of a small opening fitted with sluices to supply water to a canal; and from its northern side, which alone admits of an open view, the southern peak of San Cristobal may be seen, about $73^{\circ}$ to the north-east. Its banks, which are about eighty feet high, rise with a gentle slope in a westerly direction, till they join Mount Maiba, a hill about 500 feet high. The soil, like that of the embankments of the other volcanic lakes, consists of rapilli and lava, and is thickly wooded.

Close by is another lake, Palakpakan, of nearly the same circumference, and formed in a similar manner (of black sand and rapilli). Its banks are from thirty to one hundred feet high. From its north-western edge San Cristobal lifts its head $70^{\circ}$ to the northeast. Its waters are easily reached, and are much frequented by fishermen.

About nine o'clock, a. m., I rode from Calauan to Palm trandy. Pila, and thence in a northeasterly direction to Santa Cruz, over even, broad, and well-kept roads, through a palm-grove a mile long and a mile and a half broad, which extends down to the very edge of the lagoons. The products of these palm trees generally are not used for the production of oil but for the manufacture of brandy. Their fruit is not allowed to come to maturity; but the buds are slit open, and the sweet sap is collected
as it drips from them. It is then allowed to ferment, and subjected to distillation.* As the sap is collected twice a day, and as the blossoms, situated at the top of the tree, are forty or fifty feet above the ground, bamboos are fastened horizontally, one above the other, from one tree to another, to facilitate the necessary ascent and descent. The sap collector stands on the lower cross-piece while he holds on to the upper.

Bought by oovernment.

Profit in manufacture.

The sale of palm-brandy was at the time of my visit the monopoly of the government, which retailed it in the Estanco (government sale rooms) with cigars, stamped paper, and religious indulgences. The manufacture was carried on by private individuals; but the whole of the brandy was of necessity disposed of to the administration, which, however, paid such a high price for it that the contractors made large profits.

I afterwards met a Spaniard in Camarines who, according to his own account, must have made considerable and easy gains from these contracts. He had bought palm-trees at an average price of five reals apiece (they usually cost more, though they can be sometimes purchased for two reals). Thirty-five palms will furnish daily at least thirty-six quarts of tuba (sugar-containing sap), from which, after fermentation and distillation, six quarts of brandy of the prescribed strength can be manufactured. One man is sufficient to attend to them, and receives for his trouble half the proceeds. The

[^39]administration pays six cuartos for a quart of brandy. My friend the contractor was in annual receipt, therefore, from every thirty-five of his trees, of $360 \times 1 / 2 \times 5$ cuartos $=\$ 40.50$. As the thirty-five trees only cost him $\$ 21.875$, his invested capital brought him in about 200 per cent.

The proceeds of this monopoly (wines and liquors) were rated at $\$ 1,622,810$ in the colonial budget for 1861;

Wine and liquor monopoly a failure. but its collection was so difficult, and so disproportionately expensive, that it nearly swallowed up the whole profit. It caused espionage, robberies of all sorts, embezzlement, and bribery on a large scale. The retail of the brandy by officials, who are paid by a percentage on the consumption, did a good deal to injure the popular respect for the government. Moreover, the imposition of this improper tax on the most important industry of the country not only crippled the free trade in palms, but also the manufacture of raw sugar; for the government, to favor their own monopoly, had forbidden the sugar manufacturers to make rum from their molasses, which became in consequence so valueless that in Manila they gave it to their horses. The complaints of the manufacturers at last stirred up the administration to allow the manufacture of rum; but the palm-brandy monopoly remained intact. The Filipinos now drank nothing but rum, so that at last, in self-defence, the government entirely abandoned the monopoly (January, 1864). Since that, the rum manufacturers pay taxes according to the amount of their sale, but not upon the amount of their raw produce. In order to cover the deficit occasioned by the abandonment of the brandy monopoly, the government has made a small increase in the poll-tax. The practice of drinking brandy has
naturally much increased; it is, however, a very old habit.* With this exception, the measure has had the most favorable consequences.

Santa Cruz

Scenery along Lucban-Mauban road.

Santa Cruz is a lively, prosperous place (in 1865 it contained 11,385 inhabitants), through the center of which runs a river. As the day on which we passed through it was Sunday, the stream was full of bathers, amongst them several women, their luxuriant hair covered with broad-brimmed hats to shade them from the sun. From the ford the road takes a sharp turn and inclines first to the east and then to the south-east, till it reaches Magdalena, between which and Majaijai the country becomes hilly. Just outside the latter, a viaduct takes the road across a deep ravine full of magnificent ferns, which remind the traveller of the height-more than 600 feet-above the sea level to which he has attained. The spacious convento at Majaijai, built by the Jesuits, is celebrated for its splendid situation. The Lagoon of Bay is seen to extend far to the north-east; in the distance the Peninsula of Jalajala and the Island of Talim, from which rises the Susong-Dalaga volcano, terminate the vista. From the convento to the lake stretches an endless grove of coco-trees, while towards the south the slope of the distant high ground grows suddenly steeper, and forms an abruptly precipitous conical hill, intersected by deep ravines. This is the Banajao or Majaijai volcano, and beside it Mount San Cristobal rears its bell-shaped summit.

As everybody was occupied with the preparations for an ensuing religious festival, I betook myself, through Lucban on the eastern shore, to Mauban, situated amidst deep ravines and masses of lava at the foot of Mount

[^40]Majaijai. The vegetation was of indescribable beauty, and the miserable road was enlivened with cheerful knots of pedestrians hastening to the festival.*

I reached Lucban in three hours; it is a prosperous place of 13,000 inhabitants, to the north-east of Majaijai. A year after my visit it burnt to the ground. The agricultural produce of the district is not very important, owing to the mountainous nature of the country; but considerable industrial activity prevails there. The inhabitants weave fine straw hats from the fibre of the leaf of the buri palm-tree (corypha sp.), manufacture pandanus mats, and carry on a profitable trade at Mauban with the placer miners of North Camarines. The entire breadth of the road is covered with cement, and along its center flows, in an open channel, a sparkling rivulet.

The road from Lucban to Mauban, which is situated on the bay of Lamon, opposite to the Island of Alabat, winds along the narrow watercourse of the Mapon river, through deep ravines with perpendicular cliffs of clay. I observed several terrace-formed rice-fields similar to those so prevalent in Java, an infrequent sight in the Philippines. Presently the path led us into the very thick of the forest. Nearly all the trees were covered with aroides and creeping ferns; amongst them I noticed the angiopteris, pandanus, and several large specimens of the fan palm.

Three leagues from Lucban the river flows under a

Java-like rice fields. rock supported on prismatically shaped pillars, and then runs through a bed of round pebbles, composed of volcanic stone and white lime, as hard as marble, in which impressions of shell-fish and coral can be traced. Further up the river the volcanic rubble disappears, and the

[^41]containing strata then consist of the marble-like pebbles cemented together with calcareous spar. These strata alternate with banks of clay and coarse-grained soil, which contain scanty and badly preserved imprints of leaves and mussel-fish. Amongst them, however, I observed a flattened but still recognizable specimen of the fossil melania. The river-bed must be quite five hundred feet above the level of the sea.

Bamboo raft ferry.

Visitors to festival.

Hospitality of tribunal.

About a league beyond Mauban, as it was getting dusk, we crossed the river, then tolerably broad, on a wretched leaking bamboo raft, which sank at least six inches beneath the water under the weight of our horses, and ran helplessly aground in the mud on the opposite side.

The tribunal or common-house was crowded with people who had come to attend the festival which was to take place on the following day. The cabezas wore, in token of their dignity, a short jacket above their shirts. A quantity of brightly decorated tables laden with fruit and pastry stood against the walls, and in the middle of the principal room a dining-table was laid out for forty persons.

A European who travels without a servant-mine had run away with some wages I had rashly paid him in advance-is put down as a beggar, and I was overwhelmed with impertinent questions on the subject, which, however, I left unanswered. As I hadn't had the supper I stood considerably in need of, I took the liberty of taking a few savory morsels from the meatpot, which I ate in the midst of a little knot of wondering spectators; I then laid myself down to sleep on the bench beside the table, to which a second set of diners were already sitting down. When I awoke on the following morning there were already so many people stirring that I had no opportunity of performing my
toilet. I therefore betook myself in my dirty travelling dress to the residence of a Spaniard who had settled in the pueblo, and who received me in the most hospitable manner as soon as the description in my passport satisfied him that I was worthy of a confidence not inspired by my appearance.

My friendly host carried on no trifling business. Two English ships were at that moment in the harbor, which

Trade in molave. he was about to send to China laden with molave, a species of wood akin to teak.

On my return I visited the fine waterfall of Butucan, between Mauban and Lucban, a little apart from the high road. A powerful stream flows between two high banks of rocky soil thickly covered with vegetation, and, leaping from a ledge of volcanic rock suddenly plunges into a ravine, said to be three hundred and sixty feet in depth, along the bottom of which it is hurried away. The channel, however, is so narrow, and the vegetation so dense, that an observer looking at it from above can not follow its course. This waterfall has a great similarity to that which falls from the Semeru in Java. Here, as there, a volcanic stream flowing over vast rocky deposits forms a horizontal watercourse, which in its turn is overshadowed with immense masses of rock. The water easily forces its way between these till it reaches the solid lava, when it leaves its high, narrow, and thickly-wooded banks, and plunges into the deep chasm it has itself worn away. The pouring rain unfortunately prevented me from sketching this fine fall. It was raining when I reached the convento of Majaijai, and it was still raining when I left it three days later, nor was there any hope of improvement in the weather for another month to come. "The wet season lasts for eight or nine months in Majaijai, and during the whole period scarcely a day passes without the rain falling in torrents."-Estado geograph.

Majaijai.

Calauan.

To ascend the volcano was under such circumstances impracticable. According to some notes written by the Majaijai priest, an ascent and survey of Mount Banajao was made on the 22nd of April, 1858, by Senors Roldan and Montero, two able Spanish naval officers, specially charged with the revision of the marine chart of the archipelago. From its summit they took observations of Manila cathedral, of Mayon, another volcano in Albay, and of the Island of Polillo. They estimated the altitude of Banajao to be seven thousand and twenty Spanish feet, and the depth of its crater to be seven hundred. The crater formerly contained a lake, but the last eruption made a chasm in its southern side through which the water flowed away.*

I reached Calauan in the pouring rain, wading through the soft spongy clay upon wretched, half-starved ponies, and found I must put off my water journey to Manila till the following day, as there was no boat on the lake at this point. The next morning there were no horses to be found; and it was not till the afternoon that I procured a cart and a couple of carabaos to take me to Santa Cruz, whence in the evening the market-vessel started for Manila. One carabao was harnessed in front; the other was fastened behind the cart in order that I might have a change of animals when the first became tired. Carabao number one wouldn't draw, and number two acted as a drag-rather useless apparatus on a level

[^42]road-so I changed them. As soon as number two felt the load it laid down. A few blows persuaded it to pick itself up, when it deliberately walked to the nearest pool and dropped into it. It was with the greatest trouble that we unharnessed the cart and pushed it back on to the road, while our two considerate beasts took a mud bath. At last we reloaded the baggage, the carabaos were reharnessed in the original positions, and the driver, leaning his whole weight upon the nose-rope of the leading beast, pulled with might and main. To my great delight the animal condescended to slowly advance with the cart and its contents. At Pila I managed to get a better team, with which late in the evening, in the midst of a pouring rain, I reached a little hamlet opposite Santa Cruz. The market-vessel had left; our attempts to get a boat to take us across to the village only led to barefaced attempts at extortion, so I entered one of the largest of the hamlet's houses, which was occupied by a widow and her daughter. After some delay my request for a night's lodging was granted. I sent for some oil, to give me a little light, and something to eat. The women brought in some of their relations, who helped to prepare the food and stopped in the house to protect its owners. The next morning I crossed the river, teeming with joyous bathers, to Santa Cruz, and hired a boat there to take me across the lake to Pasig, and from thence to Manila. A contrary wind, however, forced us to land on the promontory of Jalajala, and there wait for the calm that accompanies the dawn. Betwixt the extreme southern point of the land and the houses I saw, in several places, banks of mussels projecting at least fifteen feet above the surface of the water, similar to those which are so frequently found on the sea-coast; -a proof that earthquakes have taken place in this neighborhood.

## VIII

To Albay by schooner.

Mariveles.

Storm-bound shipping.

Towards the end of August I started from Manila for Albay in a schooner which had brought a cargo of hemp and was returning in ballast. It was fine when we set sail; but on the following day the signs of a coming storm increased so rapidly that the captain resolved to return and seek protection in the small but secure harbor of Mariveles, a creek on the southern shore of Bataan, the province forming the western boundary of Manila bay. We reached it about two o'clock in the night after cruising about for fourteen hours before the entrance; and we were obliged to remain here at anchor for a fortnight, as it rained and stormed continuously for that period.

The weather obliged me to limit my excursions to the immediate neighborhood of Mariveles. Unfortunately it was not till the close of ourstay that I learnt that there was a colony of negritos in the mountains; and it was not till just before my departure that I got a chance of seeing and sketching a couple of them, male and female. The inhabitants of Mariveles have not a very good reputation. The place is only visited by ships which run in there in bad weather, when their idle crews spend the time in drinking and gambling. Some of the young girls were of striking beauty and of quite a light color; often being in reality of mixed race, though they passed as of pure Tagal blood. This is a circumstance I have observed in many seaports, and in the neighborhood of Manila; but, in the districts which are almost entirely unvisited by the Spaniards, the natives are much darker and of purer race.

The number of ships which were seeking protection from the weather in this port amounted to ten, of which three were schooners. Every morning regularly a small
pontin* used to attempt to set sail; but it scarcely got a look at the open sea before it returned, when it was saluted with the jeers and laughter of the others. It was hunger that made them so bold. The crew, who had taken some of their own produce to Manila, had spent the proceeds of their venture, and had started on their return voyage scantily provided with provisions, with the hope and intention of soon reaching their home, which they could have done with any favorable wind. Such cases frequently occur. A few natives unite to charter a small vessel, and load it with the produce of their own fields, which they set off to sell in Manila.

The straits between the Islands resemble beautiful The strait. wide rivers with charming spots upon the banks inhabited by small colonies; and the sailors generally find the weather gets squally towards evening, and anchor till the morning breaks.

The hospitable coast supplies them with fish, crabs, plenty of mussels, and frequently unprotected coconuts. If it is inhabited, so much the better. Filipino hospitality is ample, and much more comprehensive than that practised in Europe. The crews are accommodated in the different huts. After a repast shared in common, and washed down by copious draughts of palm-wine, mats are streched on the floor; the lamps-large shells, fitted with rush wicks-are extinguished, and the occupants of the hut fall asleep together. Once, as I was sailing into the bay of Manila after a five day's cruise, we overtook a craft which had sailed from the same port as we had with a cargo of coconut oil for Manila, and which had spent six months upon its trip. It is by no means uncommon for a crew which makes a long stay

[^43]Filipino
hospitality.
in the capital to squander the whole proceeds of their cargo, if they have not done it before reaching town.
Coasting Luzon. At last one evening, when the storm had quite passed away, we sailed out of Mariveles. A small, volcanic, pillar-shaped rock, bearing a striking resemblance to the Island of the Cyclops, off the coast of Sicily, lies in front of the harbor-like there, a sharp pyramid and a small, flat island. We sailed along the coast of Cavite till we reached Point Santiago, the southwestern extremity of Luzon, and then turned to the east, through the fine straits that lie between Luzon to the north and the Bisayan islands to the south. As the sun rose, a beautiful spectacle presented itself. To the north was the peak of the Taal volcano, towering above the flat plains of Batangas; and to the south the thickly-wooded, but rock-bound coast of Mindoro, the iron line of which was broken by the harbor of Porto Galera, protected from the fury of the waves by a small islet lying immediately before it. The waters around us were thickly studded with vessels which had taken refuge from the storm in the Bisayan ports, and were now returning to Manila.

Importance of straits.

These straits, which extend from the south-east to the northwest, are the great commercial highway of the Archipelago, and remain navigable during the whole year, being protected from the fury of the north-easterly winds by the sheltering peninsula of Luzon, which projects to the south-east, and by Samar, which extends in a parallel direction; while the Bisayan islands shield them from the blasts that blow from the south-west. The Islands of Mindoro, Panay, Negros, Cebu and Bohol, which Nature has placed in close succession to each other, form the southern borders of the straits; and the narrow cross channels between them form as many outlets to the Sea of Mindoro, which is bounded on the west by

Palawan, on the east by Mindanao, and on the south by the Sulu group. The eastern waters of the straits wash the coasts of Samar and Leyte, and penetrate through three small channels only to the great ocean; the narrow straits of San Bernardino, of San Juanico, and of Surigao. Several considerable, and innumerable smaller islets, lie within the area of these cursorily explained outlines.
A couple of bays on the south coast of Batangas offer a road-stead, though but little real protection, to passing vessels, which in stormy weather make for Porto Galera, in the Island of Mindoro, which lies directly opposite. A river, a league and a half in length, joins Taal, the principal port of the province, to the great inland sea of Taal, or Bombon. This stream was formerly navigable; but it has now become so sanded up that it is passable only at flood tides, and then only by very small vessels.

The province of Batangas supplies Manila with its best cattle, and exports sugar and coffee.
A hilly range bounds the horizon on the Luzon side; the striking outlines of which enable one to conjecture its volcanic origin. Most of the smaller islands to the south appear to consist of superimposed mountainous ranges, terminating seaward in precipitous cliffs. The lofty and symmetrical peak of Mount Mayon is the highest point in the panoramic landscape. Towards evening we sighted Mount Bulusan, in the south-eastern extremity of Luzon; and presently we turned northwards, and sailed up the Straits of San Bernardino, which separate Luzon from Samar.

The Bulusan volcano, "which appears to have been for a long time extinct, but which again began to erupt

Bulusan like Vesuvius. in $1852,{ }^{\prime} *$ is surprisingly like Vesuvius in outline. It

[^44]has, like its prototype, a couple of peaks. The western one, a bell-shaped summit, is the eruption cone. The eastern apex is a tall, rugged mound, probably the remains of a huge circular crater. As in Vesuvius, the present crater is in the center of the extinct one. The intervals between them are considerably larger and more uneven than the Atrio del Cavallo of the Italian volcano.

San Bernardino current.

A native captain.

The current is so powerful in the Straits of San Bernardino that we were obliged to anchor twice to avoid being carried back again. To our left we had continually in view the magnificent Bulusan volcano, with a hamlet of the same name nestling at the foot of its eastern slope in a grove of coco-trees, close to the sea. Struggling with difficulty against the force of the current, we succeeded, with the assistance of light and fickle winds, in reaching Legaspi, the port of Albay, on the following evening. Our skipper, a Spaniard, had determined to accomplish the trip as rapidly as possible.

On my return voyage, however, I fell into the hands of a native captain; and, as my cruise under his auspices presented many peculiarities, I may quote a few passages relating to it from my diary..... . The skipper intended to have taken a stock of vegetables for my use, but he had forgotten them. He therefore landed on a small island, and presently made his reappearance with a huge palm cabbage, which, in the absence of its owner, he had picked from a tree he cut down for the purpose. ...... On another occasion the crew made a descent upon a hamlet on the north-western coast of Leyte to purchase provisions. Instead of laying in a stock for the voyage at Tacloban, the sailors preferred doing so at some smaller village on the shores of the straits, where food is cheaper, and where their landing gave them a pretext to run about the country. The straits of San Juanico, never more than a mile, and often only eight
hundred feet broad, are about twenty miles in length: yet it often takes a vessel a week to sail up them; for contrary winds and an adverse current force it to anchor frequently and to lie to for whole nights in the narrower places. Towards evening our captain thought that the sky appeared very threatening, so he made for the bay of An intermittent Navo, of Masbate. There he anchored, and a part of voynje. the crew went on shore. The next day was a Sunday; the captain thought "the sky still appeared very threatening;" and besides he wanted to make some purchases. So we anchored again off Magdalena, where we passed the night. On Monday a favorable wind took us, at a quicker rate, past Marinduque and the rocky islet of Elefante, which lies in front of it. Elefante appears to be an extinct volcano; it looks somewhat like the Iriga, but is not so lofty. It is covered with capital pasture, and its ravines are dotted with clumps of trees. Nearly a thousand head of half-wild cattle were grazing on it. They cost four dollars a-piece; and their freight to Manila is as much more, where they sell for sixteen dollars. They are badly tended, and many are stolen by the passing sailors. My friend the captain was full of regret that the favorable wind gave him no opportunity of landing; perhaps I was the real obstacle. "They were splendid beasts! How easy it would be to put a couple on board! They could scarcely be said to have any real owners; the nominal proprietors were quite unaware how many they possessed, and the herd was continually multiplying without any addition from its masters. A man lands with a little money in his pocket. If he meets a herdsman, he gives him a dollar, and the poor creature thinks himself a lucky fellow. If not, so much the better. He can do the business himself; a barrel of shot or a sling suffices to settle the matter."

Plunder.

Legaspi.

As we sailed along we saw coming towards us another vessel, the Luisa, which suddenly executed a very extraordinary tack; and in a minute or two its crew sent up a loud shout of joy, having succeeded in stealing a fishbox which the fishermen of Marinduque had sunk in the sea. They had lowered a hook, and been clever enough to grapple the rope of the floating buoy. Our captain was beside himself with envy of their prize.

Legaspi is the principal port of the province of Albay. Its road-stead, however, is very unsafe, and, being exposed to the north-easterly storms, is perfectly useless during the winter. The north-east wind is the prevailing one on this coast; the south-west breeze only blows in June and July. The heaviest storms occur between October and January. They generally set in with a gentle westerly wind, accompanied with rain. The gale presently veers round to the north or the south, and attains the height of its fury when it reaches the north-east or the south-east. After the storm a calm generally reigns, succeeded by the usual wind of the prevailing monsoon. The lightly-built elastic houses of the country are capitally suited to withstand these storms; but roofs and defective houses are frequently carried away. The traffic between Manila and Legaspi is at its height between January and October; but during the autumn months all communication by water ceases. The letterpost, which arrives pretty regularly every week, is then the only link between the two places. At this season heavy packages can be sent only by a circuitous and expensive route along the south coast, and thence by water to Manila. Much more favorably situated for navigation is the port of Sorsogon, the mouth of which opens to the west, and is protected by the Island of Bagalao, which lies in front of it. Besides its security as a harbor, it has the advantage of a rapid and unbroken communica-
tion with the capital of the archipelago, while vessels sailing from Legaspi, even at the most favorable time of the year, are obliged to go round the eastern peninsula of Luzon, and meet the principal current of the Straits of San Bernardino, frequently a very difficult undertaking; and, moreover, small vessels obliged to anchor there are in great danger of being captured by pirates. The country about Sorsogon, however, is not so fertile as the neighborhood of Legaspi.

I took letters of introduction with me to both the Spanish authorities of the province; who received me

A worthy official. in the most amiable way, and were of the greatest use to me during the whole of my stay in the vicinity. I had also the good fortune to fall in with a model alcalde, a man of good family and of most charming manners; in short, a genuine caballero. To show the popular appreciation of the honesty of his character, it was said of him in Samar that he had entered the province with nothing but a bundle of papers, and had left it as lightly equipped.

## IX

My Spanish friends enabled me to rent a house in Daraga. Daraga,* a well-to-do town of twenty thousand inhabitants at the foot of the Mayon, a league and a half from Legaspi. The summit of this volcano was considered inaccessible until two young Scotchmen, Paton and

[^45]Stewart by name, demonstrated the contrary.* Since then several natives have ascended the mountain, but no Europeans.

Ascent of Mayon.

I set out on September 25th, and passed the night, by the advice of Se ñor Muños, in a hut one thousand feet above the level of the sea, in order to begin the ascent the next morning with unimpaired vigor. But a number of idlers who insisted on following me, and who kept up a tremendous noise all night, frustrated the purpose of this friendly advice; and I started about five in the morning but little refreshed. The fiery glow I had noticed about the crater disappeared with the dawn. The first few hundred feet of the ascent were covered with a tall grass quite six feet high; and then came a slope of a thousand feet or so of short grass succeeded by a quantity of moss; but even this soon disappeared, and the whole of the upper part of the mountain proved entirely barren. We reached the summit about one o'clock. It was covered with fissures which gave out sulphurous gases and steam in such profusion that we were obliged to stop our mouths and nostrils with our handkerchiefs to prevent ourselves from being suffocated. We came to a halt at the edge of a broad and deep chasm, from which issued a particularly dense vapor. Apparently we were on the brink of a crater, but the thick fumes of the disagreeable vapor made it impossible for us to guess

[^46]at the breadth of the fissure. The absolute top of the volcano consisted of a ridge, nearly ten feet thick, of solid masses of stone covered with a crust of lava bleached by the action of the escaping gas. Several irregular blocks of stone lying about us showed that the peak had once been a little higher. When, now and again, the gusts of wind made rifts in the vapor, we perceived on the northern corner of the plateau several rocky columns at least a hundred feet high, which had hitherto withstood both storm and eruption. I afterwards had an opportunity of observing the summit from Daraga with a capital telescope on a very clear day, when I noticed that the northern side of the crater was considerably higher than its southern edge.

Our descent took some time. We had still two-thirds The descent. of it beneath us when night overtook us. In the hope of reaching the hut where we had left our provisions, we wandered about till eleven o'clock, hungry and weary, and at last were obliged to wait for daylight. This misfortune was owing not to our want of proper precaution, but to the unreliability of the carriers. Two of them, whom we had taken with us to carry water and refreshments, had disappeared at the very first; and a third, "a very trustworthy man," whom we had left to take care of our things at the hut, and who had been ordered to meet us at dusk with torches, had bolted, as I afterwards discovered, back to Daraga before noon. My servant, too, who was carrying a woolen blanket and an umbrella for me, suddenly vanished in the darkness as soon as it began to rain, and though I repeatedly called him, never turned up again till the next morning. We passed the wet night upon the bare rocks, where, as our very thin clothes were perfectly wat through, we chilled till our teeth chattered. As soon, however, as the sun
rose we got so warm that we soon recovered our tempers. Towards nine o'clock we reached the hut and got something to eat after twenty-nine hours' fast.

A suspicious medal.

An early friar attempt.

In the Trabajos y Hechos Notables de la Soc. Econom. de los Amigos del Pais, for September 4th, 1823, it is said that "Don Antonio Siguenza paid a visit to the volcano of Albay on March 11th," and that the Society "ordered a medal to be struck in commemoration of the event, and in honor of the aforesaid Siguenza and his companions." Everybody in Albay, however, assured me that the two Scotchmen were the first to reach the top of the mountain. It is true that in the above notice the ascent of the volcano is not directly mentioned; but the fact of the medal naturally leads us to suppose that nothing less can be referred to. Arenas, in his memoir, says: "Mayon was surveyed by Captain Siguenza. From the crater to the base, which is nearly at the level of the sea, he found that it measured sixteen hundred and eighty-two Spanish feet or four sixty-eight and twothird meters." A little further on, he adds, that he had read in the records of the Society that they had had a gold medal struck in honor of Siguenza, who had made some investigations about the volcano's crater in 1823. He , therefore, appears to have had some doubt about Siguenza's actual ascent.

According to the Franciscan records a couple of monks attempted the ascent in 1592, in order to cure the natives of their superstitious belief about the mountain. One of them never returned; but the other, although he did not reach the summit, being stopped by three deep abysses, made a hundred converts to Christianity by the mere relation of his adventures. He died in the same year, in consequence, it is recorded, of the many variations of temperature to which he was exposed in his ascent of the volcano.

Some books say that the mountain is of considerable height; but the Estado Geografico of the Franciscans for

Estimates of height. 1855, where one could scarcely expect to find such a thoughtless repetition of so gross a typographical error, says that the measurements of Siguenza give the mountain a height of sixteen hundred and eighty-two feet. According to my own barometrical reading, the height of the summit above the level of the sea was twentythree hundred and seventy-four meters, or eighty-five hundred and fifty-nine Spanish feet.

## X

I sprained my foot so badly in ascending Mayon that I was obliged to keep the house for a month. Under the circumstances, I was not sorry to find myself settled in a roomy and comfortable dwelling. My house was built upon the banks of a small stream, and stood in the middle of a garden in which coffee, cacao, oranges, papayas, and bananas grew luxuriantly, in spite of the tall weeds which surrounded them. Several over-ripe berries had fallen to the ground, and I had them collected, roasted, mixed with an equal quantity of sugar, and made into chocolate; an art in which the natives greatly excel. With the Spaniards chocolate takes the place of coffee and tea, and even the mestizos and the well-to-do natives drink a great deal of it.

The cacao-tree comes from Central America. It Cacao. flourishes there between the 23rd parallel north and the 20th south latitude; but it is only at its best in the hottest and dampest climates. In temperate climates, where the thermometer marks less than $23^{\circ}$ C., it produces no fruit.

High quality.

Scanty production.

It was first imported into the Philippines from Acapulco; either, according to Camarines, by a pilot called Pedro Brabo de Lagunas, in 1670 ; or, according to Samar, by some Jesuits, during Salcedo's government, between 1663 and 1668. Since then it has spread over the greater part of the Island; and, although it is not cultivated with any excessive care, its fruit is of excellent quality. The cacao of Albay, if its cheapness be taken into consideration, may be considered at least equal to that of Caracas, which is so highly-prized in Europe, and which, on account of its high price, generally is largely mixed with inferior kinds.* The bushes are usually found in small gardens, close to the houses; but so great is the native laziness that frequently the berries are allowed to decay, although the local cacao sells for a higher price than the imported. At Cebu and Negros a little more attention is paid to its cultivation; but it does not suffice to supply the wants of the colony, which imports the deficiency from Ternate and Mindanao. The best cacao of the Philippines is produced in the small Island of Maripipi, which lies to the north-west of Leyte; and it is difficult to obtain, the entire crop generally being long bespoke. It costs about one dollar per liter, whereas the Albay cacao costs from two to two and a half dollars per "ganta" (three liters).

[^47]The natives generally cover the kernels, just as they are beginning to sprout, with a little earth, and, placing them in a spirally-rolled leaf, hang them up beneath the roof of their dwellings. They grow very rapidly, and, to prevent their being choked by weeds, are planted out at very short intervals. This method of treatment is probably the reason that the cacao-trees in the Philippines never attain a greater height than eight or ten feet, while in their native soil they frequently reach thirty, and sometimes even forty feet. The tree begins to bear fruit in its third or fourth year, and in its fifth or sixth it reaches maturity, when it usually yields a "ganta" of cacao, which, as I have mentioned, is worth from two to two and a half dollars, and always finds a purchaser.*

The profits arising from a large plantation would, therefore, be considerable; yet it is very rare to meet with one. I heard it said that the Economical Society had offered a considerable reward to any one who could exhibit a plantation of ten thousand berry-bearing trees; but in the Society's report I found no mention of this reward.

The great obstacles in the way of large plantations are the heavy storms which recur almost regularly every year, and often destroy an entire plantation in a single day. In 1856 a hurricane visited the Island just before the harvest, and completely tore up several large plantations by the roots; a catastrophe that naturally has caused much discouragement to the cultivators. $\dagger$ One consequence of this state of things was that the free

[^48]Diseases and pests.
importation of cacao was permitted, and people were enabled to purchase Guayaqual cacao at fifteen dollars per quintal while that grown at home cost double the money.

The plant is sometimes attacked by a disease, the origin of which is unknown, when it suffers severely from certain noxious insects.* It is also attacked by rats and other predatory vermin; the former sometimes falling upon it in such numbers that they destroy the entire harvest in a single night. Travellers in America say that a well-kept cacao plantation is a very picturesque sight. In the Philippines, however, or at any rate in East Luzon, the closely-packed, lifeless-looking, moss-covered trees present a dreary spectacle. Their existence is a brief one. Their oval leaves, sometimes nearly a foot long, droop singly from the twigs, and form no luxuriant masses of foliage. Their blossoms are very insignificant; they are of a reddish-yellow, no larger than the flowers of the lime, and grow separately on long weedy stalks. The fruit ripens in six months. When it is matured, it is of either a red or a yellow tint, and is somewhat like a very rough gherkin. Only two varieties appear to be cultivated in the Philippines. $\dagger$ The pulp of the fruit is white, tender, and of an agreeable acid taste, and contains from eighteen to twenty-four kernels, arranged in five rows. These kernels are as large as almonds, and, like them, consist of a couple of husks and a small core. This is the cacao bean; which,

[^49]roasted and finely ground, produces cacao, and with the addition of sugar, and generally of spice, makes chocolate. Till the last few years, every household in the Philippines made its own chocolate, of nothing but cacao and sugar. The natives who eat chocolate often add roasted rice to it. Nowadays there is a manufactory in Manila, which makes chocolate in the European way. The inhabitants of the eastern provinces are very fond of adding roasted pili nuts to their chocolate.*

Europeans first learnt to make a drink from cacao in Mexico, where the preparation was called chocolatl. $\dagger$ Even so far back as the days of Cortes, who was a tremendous chocolate drinker, the cacao-tree was extensively cultivated. The Aztecs used the beans as money; and Montezuma used to receive part of his tribute in this peculiar coin. It was only the wealthy among the ancient Mexicans who ate pure cacao; the poor, on account of the value of the beans as coins, used to mix maize and mandioca meal with them. Even in our own day the inhabitants of Central America make use of the beans as small coins, as they have no copper money, nor smaller silver coins than the half-real. Both in Central America and in Orinoco there yet are many

[^50]unpenetrated forests which are almost entirely composed of wild cacao-trees. I believe the natives gather some of their fruit, but it is almost worthless. By itself it has much less flavor than the cultivated kinds. Certainly it is not picked and dried at the proper season, and it gets spoilt in its long transit through the damp woods.

An uncertain venture.

Since the abolition of slavery, the crops in America have been diminishing year by year, and until a short time ago, when the French laid out several large plantations in Central America, were of but trifling value. According to F. Engel, a flourishing cacao plantation required less outlay and trouble, and yields more profit than any other tropical plant; yet its harvests, which do not yield anything for the first five or six years, are very uncertain, owing to the numerous insects which attack the plants. In short, cacao plantations are only suited to large capitalists, or to very small cultivators who grow the trees in their own gardens. Moreover, as we have said, since the abolition of slavery most of the plantations have fallen into decay, for the freed slaves are entirely wanting in industry.

The original chocolate was not generally relished in Europe. When, however, at a later period, it was mixed with sugar, it met with more approbation. The exaggerated praise of its admirers raised a bitter opposition amongst the opponents of the new drink; and the priests raised conscientious scruples against the use of so nourishing an article of food on fast days. The quarrel lasted till the seventeenth century, by which time cacao had become an everyday necessity in Spain. It was first introduced into Spain in 1520; but chocolate, on account of the monopoly of the Conquistadores, was for a long time secretly prepared on the other side of the ocean. In 1580, however, it was in common use in Spain, though
it was so entirely unknown in England that, in 1579, an English captain burnt a captured cargo of it as useless. It reached Italy in 1606, and was introduced into France by Anne of Austria. The first chocolate-house in London was opened in 1657, and in 1700 Germany at last followed suit.*

The history of coffee in the Philippines is very similar to that of cacao. The plant thrives wonderfully, and its berry has so strongly marked a flavor that the worst Manila coffee commands as high a price as the best Java. In spite of this, however, the amount of coffee produced in the Philippines is very insignificant, and, until lately, scarcely deserved mention. According to the report of an Englishman in 1828, the coffee-plant was almost unknown forty years before, and was represented only by a few specimens in the Botanical Gardens at Manila. It soon, however, increased and multiplied, thanks to the moderation of a small predatory animal (paradoxurus musanga), which only nibbled the ripe fruit, and left the hard kernels (the coffee beans) untouched, as indigestible. The Economical Society bestirred itself in its turn by offering rewards to encourage the laying out of large coffee plantations. In 1837 it granted to M. de la Gironnière a premium of $\$ 1,000$, for exhibiting a coffee plantation of sixty thousand plants, which were yielding their second harvest; and four premiums to others in the following year. But as soon as the rewards were obtained the plantations were once more allowed to fall into neglect. From this it is pretty evident that the enterprise, in the face of the then market prices and the artificially high rates of freight, did not afford a sufficient profit.

[^51]Exports. In 1856 the exports of coffee were not more than seven thousand piculs; in 1865 they had increased to thirty-seven thousand, five hundred and eighty-eight; and in 1871, to fifty-three thousand, three hundred and seventy. This increase, however, affords no criterion by which to estimate the increase in the number of plantations, for these make no returns for the first few years after being laid out. In short, larger exports may be confidently expected. But even greatly increased exports could not be taken as correct measures of the colony's resources. Not till European capital calls large plantations into existence in the most suitable localities will the Philippines obtain their proper rank in the coffee-producing districts of the world.
Highest grades.
The best coffee comes from the provinces of Laguna, Batangas and Cavite; the worst from Mindanao. The latter, in consequence of careless treatment, is very impure, and generally contains a quantity of bad beans. The coffee beans of Mindanao are of a yellowish-white color and flabby; those of Laguna are smaller, but much firmer in texture.

French preference.

Manila coffee is very highly esteemed by connoisseurs, and is very expensive, though it is by no means so nice looking as that of Ceylon and other more carefully prepared kinds. It is a remarkable fact that in 1865 France, which imported only $\$ 21,000$ worth of hemp from the Philippines, imported more than $\$ 200,000$ worth of Manila coffee, a third of the entire coffee produce of the Islands.* Manila coffee is not much prized in London, and does not fetch much more than good Ceylon ( $\$ 15$ per cwt.). $\dagger$ This, however, is no reproach to the coffee, as every one acquainted with an Englishman's appreciation of coffee will allow.

[^52]California, an excellent customer, always ready to Prices. give a fair price for a good article, will in time become one of its principal consumers.* In 1868, coffee in Manila itself cost an average of $\$ 16$ per picul. $\dagger$ In Java, the authorities pay the natives, who are compelled to cultivate it, about $\$ 3.66$ per picul.

Although the amount of coffee exported from the Philippines is trifling in comparison with the producing powers of the colony, it compares favorably with the exports from other countries.

In my Sketches of Travel, I compared the decrease of the coffee produced in Java under the forced system of cultivation with the increase of that voluntarily grown in Ceylon, and gave the Javanese produce for 1858 as sixty-seven thousand tons, and the Cingalese as thirty-five thousand tons. Since that time the relative decrease and increase have continued; and in 1866 the Dutch Indies produced only fifty-six thousand tons, and Ceylon thirty-six thousand tons. $\ddagger$

During my enforced stay in Daraga the natives brought me mussels and snails for sale; and several of them

Philippine exports.

Javan and Ceylon crops.

Amaleur scientists. wished to enter my service, as they felt "a particular vocation for Natural History." At last my kitchen was always full of them. They sallied forth every day to collect insects, and as a rule were not particularly

[^53]fortunate in their search; but this was of no consequence; in fact, it served to give them a fresh appetite for their meals. Some of the neighboring Spaniards paid me almost daily visits; and several of the native and mestizo dignitaries from a distance were good enough to call upon me, not so much for the purpose of seeing my humble self as of inspecting my hat, the fame of which had spread over the whole province. It was constructed in the usual judicious mushroom shape, covered with nito,* and its pinnacle was adorned with a powerful oil lamp, furnished with a closely fitting lid, like that of a dark lantern, so that it could be carried in the pocket. This last was particularly useful when riding about on a dark night.

Nito cigar cases.

In the neighboring pueblo cigar-cases were made out of this nito. They are not of much use as an article of commerce, and usually are only made to order. To obtain a dozen a would-be purchaser must apply to as many individuals, who, at the shortest, will condescend to finish one in a few months. The stalk of the fern, which is about as thick as a lucifer match, is split into four strips. The workman then takes a strip in his left hand, and, with his thumb on the back and his forefinger on the edge, draws the strips up and down against the knife blade until the soft pithy parts are cut away, and what remains has become fine enough for the next process. The cases are made on pointed cylindrical pieces of wood almost a couple of feet long. A pin is stuck into the center of the end of the cylinder, and the workman commences by fastening the strips of fern stalk to it. The size of the case corresponds to the

[^54]diameter of the roller, and a small wooden disk is placed in the bottom of the case to keep it steady while the sides are being plaited.

When my ankle began to get better, my first excursion was to Legaspi, where some Filipinos were giving a theatrical performance. A Spanish political refugee directed the entertainment. On each side of the stage, roofed in with palm leaves, ran covered galleries for the dignitaries of the place; the uncovered space between these was set apart for the common people. The performers had chosen a play taken from Persian history. The language was Spanish, and the dresses were, to say the least, eccentric. The stage was erected hard by a public street, which itself formed part of the auditorium, and the noise was so great that I could only catch a word here and there. The actors stalked on, chattering their parts, which not one of them understood, and moving their arms up and down; and when they reached the edge of the stage, they tacked and went back again like ships sailing against the wind. Their countenances were entirely devoid of expression, and they spoke like automatons. If I had understood the words, the contrast between their meaning and the machine-like movements of the actors would probably have been droll enough; but, as it was, the noise, the heat, and the smoke were so great that we soon left the place.

Both the theatrical performance and the whole festival bore the impress of laziness, indifference, and mindless

A Filipino theater.

Interest in festival.

Travellers have remarked the same want of gaiety amongst the Indians of America; and some of them ascribe it to the small development of the nervous system prevalent among these peoples, to which cause also they attribute their wonderful courage in bearing pain. But Tylor observes that the Indian's countenance is so different from ours that it takes us several years to rightly interpret its expression. There probably is something in both these explanations. And, although I observed no lively expression of amusement among my native friends at Legaspi, I noticed that they took the greatest possible pleasure in decorating their village, and that the procession which formed part of the festival had extraordinary charms for them. Every individual was dressed in his very best; and the honor of carrying a banner inspired those who attained it with the greatest pride, and raised an amazing amount of envy in the breasts of the remainder. Visitors poured in from all the surrounding hamlets, and erected triumphal arches which they had brought with them ready-made and which bore some complimentary inscription. I am obliged to confess that some of the holiday-makers were very drunk. The inhabitants of the Philippines have a great love for strong drink; even the young girls occasionally get intoxicated. When night came on, the strangers were hospitably lodged in the dwellings of the village. On such occasions native hospitality shows itself in a very favorable light. The door of every house stands open, and even balls take place in some of the larger hamlets. The Spanish and mestizo cavaliers, however, condescend to dance only with mestiza partners, and very seldom invite a pretty native girl to join them. The natives very rarely dance together; but in Samar I was present on one occasion at a by no means ungraceful native dance where "improvised" verses were sung.

The male dancer compared his partner with a rose, and she answered he should be careful in touching it as a rose had thorns. This would have been thought a charming compliment in the mouth of an Andalusian.

The idle existence we spent in Daraga was so agreeable to my servants and their numerous friends that

Servant subterfuges they were anxious I should stay there as long as possible; and they adopted some very ingenious means to persuade me to do so. Twice, when everything was prepared for a start the next morning, my shoes were stolen in the night; and on another occasion they kidnapped my horse. When a native has a particularly heavy load to carry, or a long journey to make, he thinks nothing of coolly appropriating the well-fed beast of some Spaniard; which, when he has done with it, he turns loose without attempting to feed it, and it wanders about till somebody catches it and stalls it in the nearest "Tribunal." There it is kept tied up and hungry until its master claims it and pays its expenses. I had a dollar to pay when I recovered mine, although it was nearly starved to death, on the pretence that it had swallowed rice to that value since it had been caught.

Small robberies occur very frequently, but they are Petty robberies. committed-as an acquaintance, a man who had spent some time in the country, informed me one evening when I was telling him my troubles-only upon the property of new arrivals; old residents, he said, enjoyed a prescriptive freedom from such little inconveniences. I fancy some waggish native must have overheard our conversation, for early the next morning my friend, the old resident, sent to borrow chocolate, biscuits, and eggs of me, as his larder and his hen-house had been rifled during the night.

Daraga market.
Monday and Friday evenings were the Daraga market nights, and in fine weather always afforded a pretty sight. The women, neatly and cleanly clad, sat in long rows and offered their provisions for sale by the light of hundreds of torches; and, when the business was over, the slopes of the mountains were studded all over with flickering little points of brightness proceeding from the torches carried by the homeward-bound market women. Besides eatables, many had silks and stuffs woven from the fibers of the pine-apple and the banana for sale. These goods they carried on their heads; and I noticed that all the younger women were accompanied by their sweethearts, who relieved them of their burdens.

## XI

Change of season.

During the whole time I was confined to the house at Daraga, the weather was remarkably fine; but unfortunately the bright days had come to an end by the time I was ready to make a start, for the north-east monsoon, the sure forerunner of rain in this part of the Archipelago, sets in in October. In spite, however, of the weather, I determined to make another attempt to ascend the mountain at Bulusan. I found I could go by boat to Bacon in the Bay of Albay, a distance of seven leagues, whence I could ride to Gubat, on the east coast, three leagues further, and then in a southerly direction along the shore to Bulusan. An experienced old native, who provided a boat and crew, had appointed ten o'clock at night as the best time for my departure. Just as we were about to start, however, we were told that four piratical craft had been seen in the bay. In a twinkling, the crew disappeared, and I was left alone in the darkness; and it took me four hours with the
assistance of a Spaniard to find them again, and make a fresh start. About nine o'clock in the morning we reached Bacon, whence I rode across a very flat country to San Roque, where the road leading to Gubat took a sharp turn to the south-east, and presently became an extremely bad one. After I had passed Gubat, my way lay along the shore; and I saw several ruined square towers, made of blocks of coral, and built by the Jesuits as a protection against the Moros, or "Moors"-a term Moro pirates. here applied to the pirates, because, like the Moors who were formerly in Spain, they are Mahometans. They come from Mindanao and from the north-west coast of Borneo. At the time of my visit, this part of the Archipelago was greatly infested with them; and a few days before my arrival they had carried off some fishermen, who were busy pulling their fish-stakes, close to Gubat. A little distance from the shore, and parallel to it, ran a coral reef, which during the south-west monsoon was here and there bare at low tide; but, when the north-east wind blew, the waves of the Pacific Ocean entirely concealed it. Upon this reef the storms had cast up many remains of marine animals, and a quantity of fungi, amongst which I noticed some exactly resembling the common sponge of the Mediterranean. They were just as soft to the touch, of a dark brown tint, as large as the fist, and of a conical shape. They absorbed water with great readiness, and might doubtless be made a profitable article of commerce. Samples of them are to be seen in the Zoological Museum at Berlin. As I went further on, I found the road excellent; and wooden bridges, all of which were in good repair, led me across the mouths of the numerous small rivers. But almost all the arches of the stone bridges I came to had fallen in, and I had to cross the streams they were supposed to span in a small boat, and make my horse swim after
me. Just before I reached Bulusan, I had to cross a ravine several hundred feet deep, composed almost entirely of white pumice stone.

Bulusan is so seldom visited by strangers that the "tribunal" where I put up was soon full of curiositymongers, who came to stare at me. The women, taking the places of honor, squatted round me in concentric rows, while the men peered over their shoulders. One morning when I was taking a shower-bath in a shed made of open bamboo work, I suddenly noticed several pairs of inquisitive eyes staring at me through the interstices. The eyes belonged exclusively to the gentler sex; and their owners examined me with the greatest curiosity, making remarks upon my appearance to one another, and seeming by no means inclined to be disturbed. Upon another occasion, when bathing in the open air in the province of Laguna, I was surrounded by a number of women, old, middle-aged, and young, who crowded round me while I was dressing, carefully inspected me, and pointed out with their fingers every little detail which seemed to them to call for special remark.

I had travelled the last part of the road to Bulusan in wind and rain; and the storm lasted with little intermission during the whole night. When I got up in the morning I found that part of the roof of the tribunal had been carried away, that the slighter houses in the hamlet were all blown down, and that almost every dwelling in the place had lost its roof. This pleasant weather lasted during the three days of my stay. The air was so thick that I found it impossible to distinguish the volcano, though I was actually standing at its foot; and, as the weather-wise of the neighborhood could hold out no promise of a favorable change at that time of the year, I put off my intended ascent till a better opportunity, and resolved to return. A former alcalde, Peñe-
randa, was reported to have succeeded in reaching the top fifteen years before, after sixty men had spent a couple of months in building a road to the summit; and the ascent was said to have taken him two whole days. But an experienced native told me that in the dry season he thought four men were quite sufficient to open a narrow path to the plateau, just under the peak, in a couple of days; but that ladders were required to get on to the actual summit.

The day after my arrival the inspector of highways and another man walked into the tribunal, both of them wet to the skin and nearly blown to pieces. My friend the alcalde had sent them to my assistance; and, as none of us could attempt the ascent, they returned with me. As we were entering Bacon on our way back, we heard the report of cannon and the sound of music. Our servants cried out "Here comes the alcalde," and in a few moments he drove up in an open carriage, accompanied by an irregular escort of horsemen, Spaniards and natives, the latter prancing about in silk hats and shirts fluttering in the wind. The alcalde politely offered me a seat, and an hour's drive took us into Sorsogon.

The roads of the province of Albay are good, but they are by no means kept in good repair: a state of things that will never be remedied so long as the indolence of the authorities continues. Most of the stone bridges in the district are in ruins, and the traveller is obliged to content himself with wading through a ford, or get himself ferried across upon a raft or in a small canoe. while his horse swims behind him. The roads were first laid down in the days of Alcalde Peñaranda, a retired officer of the engineer corps, whom we have already mentioned, and who deserves considerable praise for having largely contributed to the welfare of his province,
and for having accomplished so much from such small resources. He took care that all socage service should be duly rendered, or that money, which went towards paying for tools and materials, should be paid in lieu of it. Many abuses existed before his rule; no real services were performed by anybody who could trace the slightest relationship to any of the authorities; and, when by chance any redemption money was paid, it went, often with the connivance of the alcalde of the period, into the pockets of the gobernadorcillos, instead of into the provincial treasury. Similar abuses still prevail all over the country, where they are not prevented by the vigilance of the authorities. The numerous population, and the prosperity which the province now enjoys, would make it an easy matter to maintain and complete the existing highways. The admirable officials of the district are certainly not wanting in goodwill, but their hands are tied. Nowadays the alcaldes remain only three years in one province (in Peñaranda's time, they remained six); their time is entirely taken up with the current official and judicial business; and, just as they are beginning to become acquainted with the capabilities and requirements of their district, they are obliged to leave it. This shows the government's want of con-

Handicapped officials. fidence in its own servants. No alcalde could now possibly undertake what Peñaranda accomplished. The money paid in lieu of socage service, which ought to be applied to the wants of the province in which the socage is due, is forwarded to Manila. If an alcalde proposes some urgent and necessary improvement, he has to send in so many tedious estimates and reports, which frequently remain unnoticed, that he soon loses all desire to attempt any innovation. Estimates for large works, to carry out which would require a considerable outlay, are invariably returned from headquarters marked "not
urgent." The fact is, not that the colonial government is wanting in good-will, but that the Caja de Comunidad (General Treasury) in Manila is almost always empty, as the Spanish government, in its chronic state of bankruptcy, borrows the money and is never in a position to return it.

In 1840 Sorsogon suffered severely from an earthquake, which lasted almost continuously for thirty-five days. It raged with the greatest fury on the 21st of March. The churches, both of Sorsogon and of Casiguran, as well as the smallest stone houses, were destroyed; seventeen persons lost their lives, and two hundred were injured; and the whole neighborhood sank five feet below its former level.

The next morning I accompanied the alcalde in a falua (felucca), manned by fourteen rowers, to Casiguran, which lies directly south of Sorsogon, on the other side of a small bay, of two leagues in breadth, which it took us an hour and a half to cross. The bay was as calm as an inland lake. It is almost entirely surrounded by hills, and its western side, which is open to the sea, is protected by the Island of Bagalao, which lies in front of it. As soon as we landed, we were received with salutes of cannon and music, and flags and shirts streamed in the wind. I declined the friendly invitation of the alcalde to accompany him any further; as to me, who had no official business to transact, the journey seemed nothing but a continually recurring panorama of dinners, lunches, cups of chocolate, music, and detonations of gunpowder.

In 1850 quicksilver was discovered on a part of the

Funds diverted to Spain.

Sorsogon earthquake.

Casiguran. coast now covered by the sea. I examined the reported bed of the deposit, and it appeared to me to consist of a stratum of clay six feet in depth, superimposed over a layer of volcanic sand and fragments of pumice stone. An Englishman who was wrecked in this part of the

Archipelago, the same individual I met at the iron works at Angat, had begun to collect it, and by washing the sand had obtained something like a couple of ounces. Somebody, however, told the priest of the district that quicksilver was a poison; and, as he himself told me, so forcibly did he depict the dangerous nature of the new discovery to his parishioners that they abandoned the attempt to collect it. Since then none of them have ever seen a vestige of mercury, unless it might be from some broken old barometer. Towards evening Mount Bulusan in the south-east, and Mount Mayon in the north-west, were visible for a short time. They are both in a straight line with Casiguran.

Sea's ,encroachments.

Pirate rumors ,and robberies.

Every year the sea makes great inroads upon the coast at Casiguran; as far as I could decide from its appearance and from the accounts given me, about a yard of the shore is annually destroyed. The bay of Sorsogon is protected towards the north by a ridge of hills, which suddenly terminate, however, at its northeastern angle; and through this opening the wind sometimes blows with great fury, and causes considerable havoc in the bay, the more particularly as its coast is principally formed of clay and sand.

When I reached Legaspi again in the evening I learnt that the alarm about the pirates which had interrupted my departure had not been an idle one. Moros they certainly could not have been, for at that season none of the Mahometan corsairs could reach that part of the coast; but they were a band of deserters and vagabonds from the surrounding country, who in this part of the world find it more agreeable to pursue their freebooting career on sea than on land. During my absence they had committed many robberies and carried off several people.*

[^55]The beginning of November is the season of storms; when water communication between Albay and Manila entirely ceases, no vessel daring to put out to sea, even from the south coast. On the 9th of the month, however, a vessel that had been given up for lost entered the port, after having incurred great perils and being obliged to throw overboard the greater part of its cargo. Within twelve days of its leaving the straits of San Bernardino behind it, a sudden storm compelled it to anchor amongst the Islands of Balicuatro. One of the passengers, a newly-arrived Spaniard, put off in a boat with seven sailors, and made for four small vessels which were riding at anchor off the coast; taking them for fishermen, whereas they were pirates. They fired at him as soon as he was some distance from his ship, and his crew threw themselves into the water; but both he and they were taken prisoners. The captain of the trading brig, fearing that his vessel would fall into their clutches, slipped anchor and put out to sea again, escap-* ing shipwreck with the greatest difficulty. The pirates, as a rule, do not kill their prisoners, but employ them as rowers. But Europeans seldom survive their captivity: the tremendous labor and the scanty food are too much for them. Their clothes always being stripped off their back, they are exposed naked to all sorts of weather, and their sole daily support is a handful of rice.

## XII

No favorable change in the weather was expected in Albay before the month of January. It stormed and rained all day. I therefore determined to change my quarters to South Camarines, which, protected from the monsoon by the high range of hills running along its north-eastern boundary, enjoyed more decent weather.

The two provinces of Camarines form a long continent, with its principal frontage of shore facing to the northeast and to the south-west; which is about ten leagues broad in its middle, and has its shores indented by many bays. From about the center of its north-eastern shore there boldly projects the Peninsula of Caramuan, connected with the mainland of Camarines by the isthmus of Isarog. The north-eastern portion of the two provinces contains a long range of volcanic hills; the southwestern principally consisted, as far as my investigations permitted me to discover, of chalk, and coral reefs; in the midst of the hills extends a winding and fertile valley, which collects the waters descending from the slopes of the mountain ranges, and blends them into a navigable river, on the banks of which several flourishing hamlets have established themselves. This river is called the Bicol. The streams which give it birth are so abundant, and the slope of the sides of the valley, which is turned into one gigantic rice-field, is so gentle that in many places the lazy waters linger and form small lakes.
$A$ chain of volcanoes.

Beginning at the south-eastern extremity, the volcanoes of Bulusan, Albay, Mazaraga, Iriga, Isarog, and Colasi-the last on the northern side of San Miguel bay -are situated in a straight line, extending from the south-east to the north-west. Besides these, there is the volcano of Buhi, or Malinao, a little to the northeast of the line. The hamlets in the valley I have mentioned are situated in a second line parallel to that of the volcanoes. The southern portion of the province is sparsely inhabited, and but few streams find their way from its plateau into the central valley. The range of volcanoes shuts out, as I have said, the north-east winds, and condenses their moisture in the little lakes scattered on its slopes. The south-west portion of Cama-
rines, therefore, is dry during the north-east monsoon, and enjoys its rainy season during the prevalence of the winds that blow from the south-west. The so-called dry season which, so far as South Camarines is concerned, begins in November, is interrupted, however, by frequent showers; but from January to May scarcely a drop of rain falls. The change of monsoon takes place in May and June; and its arrival is announced by violent thunderstorms and hurricanes, which frequently last without cessation for a couple of weeks, and are accompanied by heavy rains. These last are the beginning of the wet season proper, which lasts till October. The road passes the hamlets of Camalig, Guinobatan, Ligao, Oas and Polangui, situated in a straight line on the banks of the river Quinali, which, after receiving numerous tributary streams, becomes navigable soon after passing Polangui. Here I observed a small settlement of huts, which is called after the river. Each of the hamlets I have mentioned, with the exception of the last, has a population of about fourteen thousand souls, although they are situated not more than half a league apart.

The convents in this part of the country are large, imposing buildings, and their incumbents, who were

Priestly assistance. mostly old men, were most hospitable and kind to me. Every one of them insisted upon my staying with him, and, after doing all he could for me, passed me on to his next colleague with the best recommendations. I wished to hire a boat at Polangui to cross the lake of Batu, but the only craft I could find were a couple of barotos about eight feet long, hollowed out of the trunks of trees and laden with rice. To prevent my meeting with any delay, the padre purchased the cargo of one of the boats, on the condition of its being immediately unladen; and this kindness enabled me to continue my journey in the afternoon.

The priests' importance.

Franciscan friars.

If a traveller gets on good terms with the priests he seldom meets with any annoyances. Upon one occasion I wished to make a little excursion directly after lunch, and at a quarter past eleven everything was ready for a start; when I happened to say that it was a pity to have to wait three-quarters of an hour for the meal. In a minute or two twelve o'clock struck; all work in the village ceased, and we sat down to table: it was noon. A message had been sent to the village bellringer that the Señor Padre thought he must be asleep, and that it must be long past twelve as the Señor Padre was hungry. Il est l'heure que votre Majesté désire.

Most of the priests in the eastern provinces of Luzon and Samar are Franciscan monks (The barefooted friars of the orthodox and strictest rule of Our Holy Father St. Francis, in the Philippine Islands, of the Holy and Apostolic Province of St. Gregory the Great), brought up in seminaries in Spain specially devoted to the colonial missions. Formerly they were at liberty, after ten years' residence in the Philippines, to return to their own country; but, since the abolition of the monasteries in Spain, they can do this no longer, for they are compelled in the colonies to abandon all obedience to the rule of their order, and to live as laymen. They are aware that they must end their days in the colony, and regulate their lives accordingly. On their first arrival they are generally sent to some priest in the province to make themselves acquainted with the language of the country; then they are installed into a small parish, and afterwards into a more lucrative one, in which they generally remain till their death. Most of them spring from the very lowest class of Spaniards. A number of pious trusts and foundations in Spain enable a very poor man, who cannot afford to send his son to school, to put him into a religious seminary,
where, beyond the duties of his future avocation, the boy learns nothing. If the monks were of a higher social grade, as are some of the English missionaries, they would have less inclination to mix with the common people, and would fail to exercise over them the influence they wield at present. The early habits of the Spanish monks, and their narrow knowledge of the world, peculiarly fit them for an existence among the natives. This mental equality, or rather, this want of mental disparity, has enabled them to acquire the influence they undoubtedly possess.

When these young men first come from their seminaries they are narrow-brained, ignorant, frequently almost devoid of education, and full of conceit, hatred of heretics, and proselytish ardor. These failings, however, gradually disappear; the consideration and the comfortable incomes they enjoy developing their benevolence. The insight into mankind and the confidence in themselves which distinguish the lower classes of the Spaniards, and which are so amusingly exemplified in Sancho Panza, have plenty of occasions to display themselves in the responsible and influential positions which the priests occupy. The padre is frequently the only white man in his village, probably the only European for miles around. He becomes the representative not only of religion, but of the government; he is the oracle of the natives, and his decisions in everything that concerns Europe and civilization are without appeal. His advice is asked in all important emergencies, and he has no one whom he in his turn can consult. Such a state of things naturally develops his brain. The same individuals who in Spain would have followed the plough, in the colonies carry out great undertakings. Without any technical education, and without any scientific knowledge, they build churches and bridges, and con-

Young men developed by responsibitity.
struct roads. The circumstances therefore are greatly in favor of the development of priestly ability; but it would probably be better for the buildings if they were erected by more experienced men, for the bridges are remarkably prone to fall in, the churches look like sheeppens, and the roads soon go to rack and ruin. I had much intercourse in Camarines and Albay with the priests, and conceived a great liking for them all. As a rule, they are the most unpretending of men; and a visit gives them so much pleasure that they do all in their power to make their guest's stay as agreeable as possible. Life in a large convent has much resemblance to that of a lord of the manor in Eastern Europe. Nothing can be more unconstrained, more unconventional. A visitor lives as independently as in an hotel, and many of the visitors behave themselves as if it were one. I have seen a subaltern official arrive, summon the head servant, move into a room, order his meal, and then inquire casually whether the padre, who was an utter stranger to him, was at home.

The priests of the Philippines have often been reproached with gross immorality. They are said to keep their convents full of bevies of pretty girls, and to lead somewhat the same sort of life as the Grand Turk. This may be true of the native padres; but I myself never saw, in any of the households of the numerous Spanish priests I visited, anything that could possibly cause the least breath of scandal. Their servants were exclusively men, though perhaps I may have noticed here and there an old woman or two. Ribadeneyra says:-"The natives, who observe how careful the Franciscan monks are of their chastity, have arrived at the conclusion that they are not really men, and that, though the devil had often attempted to lead these holy men astray, using the charms of some pretty Indian
girl as a bait, yet, to the confusion of both damsel and devil, the monks had always come scathless out of the struggle." Ribadeneyra, however, is a very unreliable author; and, if his physiological mistakes are as gross as his geographical ones (he says somewhere that Luzon is another name for the island of Cebu!), the monks are not perhaps as fireproof as he supposes. At any rate, his description does not universally apply nowadays. The younger priests pass their existence like the lords of the soil of old; the young girls consider it an honor to be allowed to associate with them; and the padres in their turn find many convenient opportunities. They have no jealous wives to pry into their secrets, and their position as confessors and spiritual advisers affords them plenty of pretexts for being alone with the women. The confessional, in particular, must be a perilous rock-a-head for most of them. In an appendix to the "Tagal Grammar" (which, by-thebye, is not added to the editions sold for general use) a list of questions is given for the convenience of young priests not yet conversant with the Tagal language. These questions are to be asked in the confessional, and several pages of them relate exclusively to the relations between the sexes.

As the alcaldes remain only three years in any one province, they never understand much of its language; and, being much occupied with their official business, they have neither the time nor the desire to become acquainted with the peculiarities of the districts over which they rule. The priest, on the other hand, resides continually in the midst of his parishioners, is perfectly acquainted with each of them, and even, on occasion, protects them against the authorities; his, therefore, is the real jurisdiction in the district. The position of the priests, in contradistinction to that of the
government officials, is well expressed by their respective dwellings. The casas reales, generally small, ugly, and frequently half-ruined habitations, are not suited to the dignity of the chief authority of the province. The convento, on the contrary, is almost always a roomy, imposing, and well-arranged building. In former days, when governorships were sold to adventurers whose only care was to enrich themselves, the influence of the minister of religion was even greater than it is now.*

Former legal status.

Alcaldes: formerly in trade.

The following extract from the General Orders, given by Le Gentil, will convey a clear idea of their former position:-
"Whereas the tenth chapter of the ordinances, wherein the governor of Arandia ordained that the alcaldes and the justices should communicate with the missionary priests only by letter, and that they should never hold any interview with them except in the presence of a witness, has been frequently disobeyed, it is now commanded that these disobediences shall no longer be allowed; and that the alcaldes shall make it their business to see that the priests and ministers of religion treat the gobernadorcillos and the subaltern officers of justice with proper respect, and that the aforesaid priests be not allowed either to beat, chastise, or illtreat the latter, or make them wait at table."

The former alcaldes who, without experience in official business, without either education or knowledge, and without either the brains or the moral qualifications for such responsible and influential posts, purchased their appointments from the State, or received them in consequence of successful intrigues, received a nominal salary from the government, and paid it tribute for the right to carry on trade. Arenas considered this tribute

[^56]paid by the alcaldes as a fine imposed upon them for an infringement of the law; "for several ordinances were in existence, strenuously forbidding them to dabble in any kind of commerce, until it pleased his Catholic Majesty to grant them a dispensation." The latter sources of mischief were, however, abolished by royal decree in September and October, 1844.

The alcaldes were at the same time governors, magistrates, commanders of the troops, and, in reality, the only traders in their province.* They purchased with the resources of the obras pias the articles required in the province; and they were entirely dependent for their capital upon these endowments, as they almost always arrived in the Philippines without any means of their own. The natives were forced to sell their produce to the alcaldes and, besides, to purchase their goods at the prices fixed by the latter.* In this corrupt state of things the priests were the only protectors of the unfortunate Filipinos; though occasionally they also threw in their lot with the alcaldes, and shared in the spoil wrung from their unfortunate flocks.

Nowadays men with some knowledge of the law are sent out to the Philippines as alcaldes; the government

Their borrowed capital.

Improvement in present appointees. pays them a small salary, and they are not allowed to trade. The authorities also attempt to diminish the influence of the priests by improving the position of the civil tribunals; a state of things they will not find easy of accomplishment unless they lengthen the period of service of the alcaldes, and place them in a pecuniary position that will put them beyond the temptation of pocketing perquisites. $\dagger$

[^57]Similarity with Chinese conditions.

Unidentified with country.

In Huc's work on China I find the following passage, relating to the effects of the frequent official changes in China, from which many hints may be gathered:-
"The magisterial offices are no longer bestowed upon upright and just individuals, and, as a consequence, this once flourishing and well-governed kingdom is day by day falling into decay, and is rapidly gliding down the path that leads to a terrible and, perhaps, speedy dissolution. When we seek to discover the cause of the general ruin, the universal corruption which too surely is undermining all classes of Chinese society, we are convinced that it is to be found in the complete abandonment of the old system of government effected by the Manchu dynasty. It issued a decree forbidding any mandarin to hold any post longer than three years in the same province, and prohibiting any one from possessing any official appointment in his native province. One does not form a particularly high idea of the brain which conceived this law; but, when the Manchu Tartars found that they were the lords of the empire, they began to be alarmed at their small numbers, which were trifling in comparison with the countless swarms of the Chinese; and they dreaded lest the influence which the higher officials would acquire in their districts might enable them to excite the populace against their foreign rulers.
"The magistrates, being allowed to remain only a year or two in the same province, lived there like strangers, without acquainting themselves with the wants of the people they governed; there was no tie between them. The only care of the mandarins was to amass as much wealth as possible before they quitted their posts; and they then began the same game in a fresh locality, until finally they returned home in possession of a handsome fortune gradually collected in their different appointments. They were only birds of passage. What did it matter? The morrow would find them at the other end of the kingdom, where the cries
of their plundered victims would be unable to reach them. In this manner the governmental policy rendered the mandarins selfish and indifferent. The basis of the monarchy is destroyed, for the magistrate is no longer a paternal ruler residing amongst and mildly swaying his children, but a marauder, who arrives no man knows whence, and who departs no one knows whither. The consequence is universal stagnation; no great undertakings are accomplished; and the works and labors of former dynasties are allowed to fall into decay. The mandarins say to themselves: 'Why should we undertake what we can never accomplish? Why should we sow that others may reap?' * * *They take no interest in the affairs of the district; as a rule, they are suddenly transplanted into the midst of a population whose dialect even they do not understand. When they arrive in their mandarinates they usually find interpreters, who, being permanent officials and interested in the affairs of the place, know how to make their services indispensable; and these in reality are the absolute rulers of the district."

Interpreters are especially indispensable in the Philippines, where the alcaldes never by any chance understand any of the local dialects. In important matters the native writers have generally to deal with the priest, who in many cases becomes the virtual administrator of authority. He is familiar with the characters of the inhabitants and all their affairs, in the settlement of which his intimate acquaintance with the female sex stands him in good stead. An eminent official in Madrid told me in 1867 that the then minister was considering a proposal to abolish the restriction of office in the colonies to three years.*

[^58]Dependence on interpreters.

Importance of interpreters in Philippines.

Fear' of officials' popularity.

Different
English amd Dutch polacy.

The dread which caused this restriction, viz., that an official might become too powerful in some distant province, and that his influence might prove a source of danger to the mother country, is no longer entertained. Increased traffic and easier means of communication have destroyed the former isolation of the more distant provinces. The customs laws, the increasing demand for colonial produce, and the right conceded to foreigners of settling in the country, will give a great stimulus to agriculture and commerce, and largely increase the number of Chinese and European residents. Then at last, perhaps, the authorities will see the necessity of improving the social position of their officials by decreasing their number, by a careful selection of persons, by promoting them according to their abilities and conduct, and by increasing their salaries, and allowing them to make a longer stay in one post. The commercial relations of the Philippines with California and Australia are likely to become very active, and liberal ideas will be introduced from those free countries. Then, indeed, the mother country will have earnestly to consider whether it is advisable to continue its exploitation of the colony by its monopolies, its withdrawal of gold, and its constant satisfaction of the unfounded claims of a swarm of hungry place-hunters.*

English and Dutch colonial officials are carefully and expressly educated for their difficult and responsible positions. They obtain their appointments after pas-

[^59]sing a stringent examination at home, and are promoted to the higher colonial offices only after giving proofs of fitness and ability. What a different state of things prevails in Spain! When a Spaniard succeeds in getting an appointment, it is difficult to say whether it is due to his personal capacity and merit or to a series of successful political intrigues.*

## XIII

In an hour and a half after leaving Polangui we reached

## Batu.

 Batu, a village on the north-western shore of the lake of the same name. The inhabitants, particularly the women, struck me by their ugliness and want of cleanliness. Although they lived close to the lake, and drew their daily drinking water from it, they never appeared to use it for the purpose of washing. The streets of the village also were dirty and neglected; a circumstance explained, perhaps, by the fact of the priest being a native.Towards the end of the rainy season, in November, The lake. the lake extends far more widely than it does in the dry, and overflows its shallow banks, especially to the southwest. A great number of water-plants grow on its borders; amongst which I particularly noticed a delicate seaweed, $\dagger$ as fine as horse hair, but intertwined in such close and endless ramifications that it forms a flooring strong enough to support the largest waterfowl. I

[^60]saw hundreds of them hopping about and eating the shell fish and prawns, which swarmed amidst the meshes of the net-like seaweed and fell an easy prey to their feathered enemies. The natives, too, were in the habit of catching immense quantities of the prawns with nets made for the purpose. Some they ate fresh; and some they kept till they were putrid, like old cheese, and then used them as a relish to swallow with their rice. These small shell-fish are not limited to the Lake of Batu. They are caught in shoals in both the salt and the fresh waters of the Philippine and Indian archipelagos, and, when salted and dried by the natives, form an important article of food, eaten either in soup or as a kind of potted paste. They are found in every market, and are largely exported to China. I was unable to shoot any of the waterfowl, for the tangles of the seaweed prevented my boat from getting near them.

A neslected product.

When I revisited the same lake in February, I found its waters so greatly fallen that they had left a circular belt of shore extending all around the lake, in most places nearly a hundred feet broad. The withdrawal of the waters had compressed the tangled seaweed into a kind of matting, which, bleached by the sun, and nearly an inch thick, covered the whole of the shore, and hung suspended over the stunted bushes which, on my first visit, had been under water. I have never either seen elsewhere, or heard any one mention, a similar phenomenon. This stuff, which could be had for nothing, was excellent for rifle-stoppers and for the stuffing of birds, so I took a great quantity of it with me. This time the bird-hunting went well, too.

The native priest of Batu was full of complaints about his parishioners, who gave him no opportunities of gaining an honest penny. "I am never asked for a mass, sir; in fact, this is such a miserable hole that it is shunned
by Death itself. In D., where I was for a long time coadjutor, we had our couple of burials regularly every day at three dollars a head, and as many masses at a dollar apiece as we had time to say, besides christenings and weddings, which always brought a little more grist to the mill. But here nothing takes place, and I scarcely make anything." This stagnant state of things had induced him to turn his attention to commerce. The average native priest, of those I saw, could hardly be called a credit to his profession. Generally ignorant, often dissipated, and only superficially acquainted with his duties, the greater part of his time was given over to gambling, drinking, and other objectionable amusements. Little care was taken to preserve a properly decorous behavior, except when officiating in the church, when they read with an absurd assumption of dignity, without understanding a single word. The conventos are often full of girls and children, all of whom help themselves with their fingers out of a common dish. The worthy padre of Batu introduced a couple of pretty girls to me as his two poor sisters, whom, in spite of his poverty, he supported; but the servants about the place openly spoke of these young ladies' babies as being the children of the priest.

The guiding principle of Spanish colonial policy-to set one class against another, and to prevent either from

The native clergy. becoming too powerful-seems to be the motive for placing so many native incumbents in the parsonages of the Archipelago. The prudence of this proceeding, however, seems doubtful. A Spanish priest has a great deal of influence in his own immediate circle, and forms, perhaps, the only enduring link between the colony and the mother-country. The native priest is far from affording any compensation for the lack of either of these advantages. He generally is but little respected
by his flock, and certainly does nothing to attach them to Spain; for he hates and envies his Spanish brethren, who leave him only the very worst appointments, and treat him with contempt.

I rode from Batu to Nabua over a good road in half an hour. The country was flat, with rice-fields on both sides of the road; but, while in Batu the rice was only just planted, in Nabua it already was almost ripe. I was unable to obtain any explanation of this incongruity, and know not how to account for such a difference of climate between two hamlets situated in such close proximity to one another, and separated by no range of hills. The inhabitants of both were ugly and dirty, and were different in these respects from the Tagalogs. Nabua, a place of 10,875 inhabitants, is intersected by several small streams, whose waters, pouring down from the eastern hills, form a small lake, which empties itself into the river Bicol. Just after passing the second bridge beyond Nabua the road, inclining eastwards, wends in a straight line to Iriga, a place lying to the south-west of the volcano of the same name.

I visited a small settlement of pagans situated on the slope of the volcano. The people of the plains call them indifferently Igorots, Cimarrons, Remontados, Infieles, or Montesinos. None of these names, however, with the exception of the two last, are appropriate ones. The first is derived from the term applied in the north of the Island to the mixed descendants of Chinese and Filipino parents. The word Cimarron (French, marrow) is borrowed from the American slave colonies, where it denoted negroes who escaped from slavery and lived in a state of freedom; but here it is applied to natives who prefer a wild existence to the comforts of village life, which they consider are overbalanced by the servitude and bondage which accompany them. The term

Remontado explains itself, and has the same signification as Cimarron. As the difference between the two states-on account of the mildness of the climate, and the ease with which the wants of the natives are supplied is far less than it would be in Europe, these self-constituted exiles are more frequently to be met with than might be supposed; the cause of their separation from their fellowmen sometimes being some offence against the laws, sometimes annoying debts, and sometimes a mere aversion to the duties and labors of village life. Every Filipino has an innate inclination to abandon the hamlets and retire into the solitude of the woods, or live isolated in the midst of his own fields; and it is only the village prisons and the priests-the salaries of the latter are proportionate to the number of their parishioners-that prevent him from gradually turning the pueblos into visitas,* and the latter into ranchos. Until a visit to other ranchos in the neighborhood corrected my first impression, I took the inhabitants of the slopes of the Iriga for cross-breeds between the low-landers and negritos. The color of their skin was not black, but a dark brown, scarcely any darker than that of Filipinos who have been much exposed to the sun; and only a few of them had woolly hair. The negritos whom I saw at Angat and Mariveles knew nothing whatever about agriculture, lived in the open air, and supported themselves upon the spontaneous products of nature; but the half-savages of the Iriga dwell in decent huts, and cultivate several vegetables and a little sugar-cane. No pure negritos, as far as I could ascertain, are to be met with in Camarines. A thickly-populated province, only sparsely dotted with lofty hills, would be ill-suited for the residence of a nomadic hunting race ignorant of agriculture.

[^61]Iriga
settlements.

Poison arrows.

Crucifixes.

Mt. Iriga.

The ranchos on the Iriga are very accessible, and their inhabitants carry on a friendly intercourse with the lowlanders; indeed, if they didn't, they would have been long ago exterminated. In spite of these neighborly communications, however, they have preserved many of their own primitive manners and customs. The men go about naked with the exception of a cloth about the loins; and the women are equally unclad, some of them perhaps wearing an apron reaching from the hip to the knee.* In the larger ranchos the women were decently clad in the usual Filipino fashion. Their household belongings consisted of a few articles made of bamboo, a few calabashes of coconut-shell, and an earthen cookingpot, and bows and arrows. These latter are made very carefully, the shaft from reeds, the point from a sharpcut bamboo, or from a palm-tree, with one to three sharp points. In pig-hunting iron-pointed poison arrows are used. Although the Igorots are not Christians, they decorate their huts with crucifixes, which they use as talismans. If they were of no virtue, an old man remarked to me, the Spaniards would not employ them so numerously. $\dagger$ The largest rancho I visited was nominally under the charge of a captain, who, however, had little real power. At my desire he called to some naked boys idly squatting about on the trees, who required considerable persuasion before they obeyed his summons; but a few small presents-brazen earrings and combs for the women, and cigars for the men-soon put me on capital terms with them.

After a vain attempt to reach the top of the Iriga volcano I started for Buhi, a place situated on the

[^62]southern shore of the lake of that name. Ten minutes after leaving Iriga I reached a spot where the ground sounded hollow beneath my horse's feet. A succession of small hillocks, about fifty feet high, bordered each side of the road; and towards the north I could perceive the huge crater of the Iriga, which, in the distance, appeared like a truncated cone. I had the curiosity to ascend one of the hillocks, which, seen from its summit, looked like the remains of some former crater, which had probably been destroyed by an earthquake and split up into these small mounds.

When I got to Buhi the friendly priest had it proclaimed by sound of drum that the newly-arrived strangers wished to obtain all kinds of animals, whether of earth, of air, or of water; and that each and all would be paid for in cash. The natives, however, only brought us moths, centipedes, and other vermin, which, besides enabling them to have a good stare at the strangers, they hoped to turn into cash as extraordinary curiosities.

The following day I was the spectator of a gorgeous procession. First came the Spanish flag, then the

A church procession. village kettle-drums, and a small troop of horsemen in short jackets and shirts flying in the wind, next a dozen musicians, and finally, as the principal figure, a man carrying a crimson silk standard. The latter individual evidently was deeply conscious of his dignified position, and his countenance eloquently expressed the quantity of palm wine he had consumed in honor of the occasion. He sat on his horse dressed out in the most absurd manner in a large cocked hat trimmed with colored paper instead of gold lace, with a woman's cape made of paper outside his coat, and with short, tight-fitting yellow breeches and immense white stockings and shoes. Both his coat and his breeches were liberally ornamented with paper trimmings. His steed, led by a couple of cabezas, was

Papal concessions to Spain.
appointed with similar trappings. After marching through all the streets of the village the procession came to a halt in front of the church.

This festival is celebrated every year in commemoration of the concession made by the Pope to the King of Spain permitting the latter to appropriate to his own use certain revenues of the Church. The Spanish Throne consequently enjoys the right of conferring different indulgences, even for serious crimes, in the name of the Holy See. This right, which, so to speak, it acquired wholesale, it sells by retail to its customers (it formerly disposed of it to the priests) in the estanco, and together with its other monopolies, such as tobacco, brandy, lottery tickets, stamped paper, etc., all through the agency of the priests; without the assistance of whom very little business would be done. The receipts from the sale of these indulgences have always been very fluctuating. In 1819 they amounted to $\$ 15,930$; in 1839 to $\$ 36,390$; and in 1860 they were estimated at $\$ 58,954$. In the year $1844-5$ they rose to $\$ 292,115$. The cause of this large increase was that indulgences were then rendered compulsory; so many being alloted to each family, with the assistance and under the superintendence of the priests and tax-collectors who received a commission of five and eight per cent on the gross amount collected.*

The Lake of Buhi ( 300 feet above the sea-level) presents an extremely picturesque appearance, surrounded as it is on all sides by hills fully a thousand feet high; and its western shore is formed by what still remains of the Iriga volcano. I was informed by the priests of the neighboring hamlets that the volcano, until the commencement of the seventeenth century, had been a closed cone, and that the lake did not come into

[^63]existence till half of the mountain fell in, at the time of its great eruption. This statement I found confirmed in the pages of the Estado Geografico:-"On the fourth of January, 1641 -a memorable day, for on that date all the known volcanoes of the Archipelago began to erupt at the same hour-a lofty hill in Camarines, inhabited by heathens, fell in, and a fine lake sprang into existence upon its site. The then inhabitants of the village of Buhi migrated to the shores of the new lake, which, on this account, was henceforward called the Lake of Buhi."

Perrey, in the Mémoires de l'Académie de Dijon, mentions another outbreak which took place in Camarines in 1628: "In 1628, according to trustworthy reports, fourteen different shocks of earthquake occurred on the same day in the province of Camarines. Many buildings were thrown down, and from one large mountain which the earthquake rent asunder there issued such an immense quantity of water that the whole neighborhood was flooded, trees were torn up by the roots, and, in one hour, from the seashore all plains were covered with water (the direct distance to the shore is two and one-half leagues).*

It is very strange that the text given in the footnote does not agree with A. Perrey's translation.

1628 Camarines earthquake.
$A$ mistranslation The former does not mention that water came out of the mountains and says just the contrary, that trees, which were torn up by the roots, took the place of the sea for one hour on the shore, so that no water could be seen.

[^64]Unreliable authorities.

Another attempt at mountain climbing.

The data of the Estado Geografico are apt to create distrust as the official report on the great earthquake of 1641 describes in detail the eruptions of three volcanoes, which happened at the same time (of these two were in the South of the Archipelago and one in Northern Luzon) while Camarines is not mentioned at all. This suspicion is further strengthened by the fact that the same author (Nierembergius) whose remarks on the eruptions of 1628 in Camarines are quoted, gives in another book of his a detailed report on the events of 1641 without mentioning this province. If one considers the indifference of the friars toward such events in Nature, it is not improbable that the eruptions of 1641 when a mountain fell in in Northern Luzon and a lake took its place, has been transferred on the Iriga. To illustrate the indifference it may be mentioned that even the padres living at the foot of the Albay could not agree upon the dates of its very last eruptions.

When I was at Tambong, a small hamlet on the shore of the lake belonging to the parochial district of Buhi, I made a second unsuccessful attempt to reach the highest point of the Iriga. We arrived in the evening at the southern point of the crater's edge ( 1,041 meters above the level of the sea by my barometrical observation), where a deep defile prevented our further progress. Here the Igorots abandoned me, and the low-landers refused to bivouac in order to pursue the journey on the following day; so I was obliged to return. Late in the evening, after passing through a coco plantation, we reached the foot of the mountain and found shelter from a tempest with a kind old woman; to whom my servants lied so shamelessly that, when the rain had abated, we were, in spite of our failure, conducted with torches to Tambong, where we found the palm-grove
round the little hamlet magically illuminated with bright bonfires of dry coconut-leaves in honor of the Conquistadores del Iriga; and where I was obliged to remain for the night, as the people were too timorous or too lazy to cross the rough water of the lake.

Here I saw them preparing the fiber of the pine-apple for weaving. The fruit of the plants selected for this purpose is generally removed early; a process which causes the leaves to increase considerably both in length and in breadth. A woman places a board on the ground, and upon it a pine-apple-leaf with the hollow side upwards. Sitting at one end of the board, she holds the leaf firmly with her toes, and scrapes its outersurface with a potsherd; not with the sharp fractured edge but with the blunt side of the rim; and thus the leaf is reduced to rags. In this manner a stratum of coarse longitudinal fiber is disclosed, and the operator, placing her thumb-nail beneath it, lifts it up, and draws it away in a compact strip; after which she scrapes again until a second fine layer of fiber is laid bare. Then, turning the leaf round, she scrapes its back, which now lies upwards, down to the layer of fiber, which she seizes with her hand and draws at once, to its full length, away from the back of the leaf. When the fiber has been washed, it is dried in the sun. It is afterwards combed, with a suitable comb, like women's hair, sorted into frur classes, tied together, and treated like the fiber of the lupi. In this crude manner are obtained the threads for the celebrated web nipis de Piña, which is considered piña. by experts the finest in the world. Two shirts of this kind are in the Berlin Ethnographical Museum (Nos. 291 and 292). Better woven samples are in the Gewerbe Museum of Trade and Commerce. In the Philippines, where the fineness of the work is best

Rain prevents another ascent

Mountaineers arrow poison
understood and appreciated, richly-embroidered costumes of this description have fetched more than $\$ 1,400$ each.*

At Buhi, which is not sufficiently sheltered towards the north-east, it rained almost as much as at Daraga. I had found out from the Igorots that a path could be forced through the tall canes up to the summit; but the continual rain prevented me; so I resolved to cross the Malinao, returning along the coast to my quarters, and then, freshly equipped, descend the river Bicol as far as Naga.

Before we parted the Igorots prepared for me some arrow poison from the bark of two trees. I happened to see neither the leaves nor the blossoms, but only the bark. A piece of bark was beaten to pieces, pressed dry, wetted, and again pressed. This was done with the bare hand, which, however, sustained no injury. The juice thus extracted looked like pea-soup, and was warmed in an earthen vessel over a slow fire. During the process it coagulated at the edges; and the coagulated mass was again dissolved, by stirring it into the boiling fluid mass. When this had reached the consistency of syrup, a small quantity was scraped off the inner surface of a second piece of bark, and its juice squeezed into the vessel. This juice was a dark brown color. When the mass had attained the consistency of a thin jelly, it was scraped out of the pot with a chip and preserved on a leaf sprinkled with ashes. For poisoning an arrow they use a piece of the size of a hazel-nut, which, after being warmed, is distributed uniformly over the broad iron point; and the poisoned arrow serves for repeated use.

[^65]At the end of November I left the beautiful lake of Sapariver Buhi, and proceeded from its eastern angle for a short distance up the little river Sapa,* the alluvial deposits of which form a considerable feature in the configuration of the lake. Across a marshy meadow we reached the base of the Malinao or Buhi mountain, the slippery clay of the lower slope merging higher up into volcanic sand. The damp undergrowth swarmed with small leeches; I never before met with them in such numbers. Leeches These little animals, no stouter when streched out than a linen thread, are extraordinarily active. They attach themselves firmly to every part of the body, penetrating even into the nose, the ears, and the eyelids, where, if, they remain unobserved, they gorge themselves to such excess that they become as round as balls and look like small cherries. While they are sucking no pain is felt; but afterwards the spots attacked often itch the whole day long. $\dagger$ In one place the wood consisted for the most part of fig-trees, with bunches of fruit quite Fig-trees six feet in length hanging from the stems and the thicker branches; and between the trees grew ferns, aroids, and orchids. After nearly six hours' toil we reached the pass ( 841 meters above the sea level), and descended the eastern slope. The forest on the eastern side of the mountain is still more magnificent than that on the west. From a clearing we obtained a fine view of the sea, the Island of Catanduanes, and the plain of Tabaco. At sunset we reached Tibi, where I quartered myself in Prison the prison. This, a tolerably clean place, enclosed with as hotel strong bamboos, was the most habitable part of a long

[^66]shed which supplied the place of the tribunal destroyed in a storm two years before. At Tibi I had an opportunity of sketching Mount Malinao (called also Buhi and Takit), which from this side has the appearance of a large volcano with a distinct crater. From the lake of Buhi it is not so clearly distinguishable.

Igabo hot spring.

Naglegbeng silicious springs.

Not far from Tibi, exactly north-east of Malinao, we found a small hot spring called Igabo. In the middle of a plot of turf encircled by trees was a bare spot of oval form, nearly a hundred paces long and seventy wide. The whole space was covered with stones, rounded by attrition, as large as a man's head and larger. Here and there hot water bubbled out of the ground and discharged into a little brook; beside it some women were engaged in cooking their food, which they suspended in nets in the hottest parts of the water. On the lower surfaces of some of the stones a little sulphur was sublimated; of alum hardly a trace was perceptible. In a cavity some caolin had accumulated, and was used as a stain.

From here I visited the stalactite springs, not far distant, of Naglegbeng.* I had expected to see a calcareous fountain, but found the most magnificent masses of silica of infinite variety of form; shallow cones with cylindrical summits, pyramidal flights of steps, round basins with ribbed margins, and ponds of boiling water. One spot, denuded of trees, from two to three hundred paces in breadth and about five hundred in length, was, with the exception of a few places overgrown with turf, covered with a crust of silicious dross, which here and there formed large connected areas, but was generally broken up into flaky plates by the vertical springs which pierced it. In numerous localities boiling hot mineral water containing silica was forcing itself out of the

[^67]ground, spreading itself over the surface and depositing a crust, the thickness of which depended on its distance from the center point. In this manner, in the course of time, a very flat cone is formed, with a basin of boiling water in the middle. The continuous deposit of dross contracts the channel, and a less quantity of water overflows, while that close to the edge of the basin evaporates and deposits a quantity of fine silicious earth; whence the upper portion of the cone not only is steeper than its base, but frequently assumes a more cylindrical form, the external surface of which on account of the want of uniformity in the overflow, is ribbed in the form of stalactites. When the channel becomes so much obstructed that the efflux is less than the evaporation, the water ceases to flow over the edge, and the mineral dross, during the continual cooling of the water, is then deposited, with the greatest uniformity, over the inner area of the basin. When, however, the surface of the water sinks, this formation ceases at the upper portion of the basin; the interior wall thickens; and, if the channel be completely stopped up and all the water evaporated, there remains a bell-shaped basin as even as if excavated by the hand of man. The water now seeks a fresh outlet, and bursts forth where it meets with the least obstruction, without destroying the beautiful cone it has already erected. Many such examples exist. In the largest cones, however, the vapors generated acquire such power that, when the outlet is completely stopped up, they break up the overlying crust in concentrically radiating flakes; and the water, issuing anew copiously from the center, deposits a fresh crust, which again, by the process we have just described is broken up into a superimposed layer of flakes. In this manner are formed annular layers, which in turn are gradually covered by fresh deposits from the over-
flowing water. After the pyramid of layers is complete and the outlet stopped up, the water sometimes breaks forth on the slope of the same cone; a second cone is then formed near the first, on the same base. In the vicinity of the silicious springs are seen deposits of white, yellow, red, and bluish-grey clays, overlaying one another in narrow strata-like variegated marl, manifestly the disintegrated produce of volcanic rocks transported hither by rain and stained with oxide of iron. These clays perhaps come from the same rocks from the disintegration of which the silicious earth has been formed. Similar examples occur in Iceland and in New Zealand; but the products of the springs of Tibi are more varied, finer, and more beautiful than those of the Iceland Geysers.

A worldwonder.

The wonderful conformations of the red cone are indeed astonishing, and hardly to be paralleled in any other quarter of the world.*

## XIV

Quinali river.
On my second journey in Camarines, which I undertook in February, I went by water from Polangui, past Batu, as far as Naga. The Quinali, which runs into the southeastern corner of the lake of Batu, runs out again on the north side as the Bicol River, and flows in a northwesterly direction as far as the Bay of San Miguel. It forms the medium of a not inconsiderable trade between Albay and Camarines, particularly in rice; of which the supply grown in the former province does not suffice for the population, who consume the superfluity of Camarines. The rice is conveyed in large boats up the river as far as Quinali, and thence trans-

[^68]ported further on in carabao carts; and the boats return empty. During the dry season of the year, the breadth of the very tortuous Bicol, at its mouth, is a little over sixty feet, and increases but very gradually. There is considerable variety of vegetation upon its banks, and in animal life it is highly attractive. I was particularly struck with its numerous monkeys and
water-fowl. Of the latter the Plotus variety was most abundant, but difficult to shoot. They sit motionless

Plotus water-fowl. on the trees on the bank, only their thin heads and necks, like those of tree-snakes, overtopping the leaves. On the approach of the boat they precipitate themselves hastily into the water; and it is not until after many minutes that the thin neck is seen rising up again at some distance from the spot where the bird disappeared. The Plotus appears to be as rapid on the wing as it is in swimming and diving.

In Naga, the chief city of South Camarines, I alighted at the tribunal, from which, however, I was immediately invited by the principal official of the district-who is famed for his hospitality far beyond the limits of his province-to his house, where I was loaded with civilities and favors. This universally beloved gentleman put everybody under contribution in order to enrich my collections, and did all in his power to render my stay agreeable and to further my designs.

Naga is the seat of a bishopric and of the provincial government. In official documents it is called Nueva Caceres, in honor of the Captain-General, D. Fr. de Sande, a native of Caceres, who about 1578 founded Naga (the Spanish town) close to the Filipino village. At the beginning of the seventeenth century it numbered nearly one hundred Spanish inhabitants; at the present time it hardly boasts a dozen. Murillo Velarde remarks (xiii, 272), in contrast to the state of things in

America, that of all the towns founded in the Philippines, with the exception of Manila, only the skeletons, the names without the substance, have been preserved. The reason is, as has been frequently shown, that up to the present time plantations, and consequently proper settlers, have been wanting. Formerly Naga was the principal town of the whole of that district of Luzon lying to the east of Tayabas, which, on account of the increased population, was divided into the three provinces of North and South Camarines and Albay. The boundaries of these governmental districts, those between Albay and South Camarines more especially, have been drawn very arbitrarily; although, the whole of the territory, as is shown by the map, geographically

Land o! the Bicols.

The Bicols. is very well defined. The country is named Camarines; but it might more suitably be called the country of the Bicols, for the whole of it is inhabited by one race, the Bicol-Filipinos, who are distinguished by their speech and many other peculiarities from their neighbors, the Tagals on the west, and the Bisayans on the islands to the south and east.

The Bicols are found only in this district and in a few islands lying immediately in front of it. Of their coming hither no information is to be obtained from the comprehensive but confused histories of the Spanish monks. Morga considers them to be natives of the island; on the other hand, it is asserted by tradition that the inhabitants of Manila and its vicinity are descended from Malays who have migrated thither, and from the inhabitants of other islands and more distant provinces.* Their speech is midway between that of the Tagalogs and the Bisayans, and they themselves appear, in both their

[^69]manners and customs, to be a half-breed between these two races. Physically and mentally they are inferior to the Tagalogs, and superior to the inhabitants of the eastern Bisayan Islands. Bicol is spoken only in the two Camarines, Albay, Luzon, the Islands of Masbate, Burias, Ticao, and Catanduanes, and in the smaller adjoining islands. The inhabitants of the volcanic mountain Isarog and its immediate neighborhood speak it in the greatest purity. Thence towards the west the Bicol dialect becomes more and more like Tagalog, and towards the east like Bisayan, until by degrees, even before reaching the boundaries of their ethnographical districts, it merges into these two kindred languages.

In South Camarines the sowing of the rice in beds begins in June or July, always at the commencement of

Bicol language the rainy season; but in fields artificially watered, earlier, because thus the fruit ripens at a time when, the store in the country being small, its price is high. Although the rice fields could very well give two crops yearly, they are tilled only once. It is planted out in August, with intervals of a hand's-breadth between each row and each individual plant; and within four months the rice is ripe. The fields are never fertilized, and but seldom ploughed; the weeds and the stubble being generally trodden into the already soaked ground by a dozen carabaos, and the soil afterwards simply rolled with a cylinder furnished with sharp points, or loosened with the harrow (sorod). Besides the agricultural implements named above, there are the Spanish hatchet (azadon) and a rake of bamboo (kag-kag) in use. The harvest is effected in a peculiar manner. The rice which is soonest ripe is cut for ten per cent, that is, the laborer receives for his toil the tenth bundle for himself. At this time of year rice is very scarce,

Rice land production.
want is imminent, and labor reasonable. The more fields, however, that ripen, the higher become the reapers' wages, rising to twenty, thirty, forty, even fifty per cent; indeed, the executive sometimes consider it to be necessary to force the people to do harvest by corporal punishment and imprisonment, in order to prevent a large portion of the crop from rotting on the stalk. Nevertheless, in very fruitful years a part of the harvest is lost. The rice is cut halm by halm (as in Java) with a peculiarly-formed knife, or, failing such, with the sharp-edged flap of a mussel* found in the ditches of the rice-fields, which one has only to stoop to pick up.

A quiñon of the best rice land is worth from sixty to one hundred dollars ( $\$ 5.50$ to $\$ 9$ per acre). Rice fields on rising grounds are dearest, as they are not exposed to devastating floods as are those in the plain, and may be treated so as to insure the ripening of the fruit at the time when the highest price is to be obtained.

A ganta of rice is sufficient to plant four topones ( 1 topon $=1$ loan); from which 100 manojos (bundles) are gathered, each of which yields half a ganta of rice. The old ganta of Naga, however, being equal to a modern ganta and a half, the produce may be calculated at 75 cavanes per quiñon, about $93 / 4$ bushels per acre. $\dagger$ In books 250 cavanes are usually stated to be the average produce of a quiñon; but that is an exaggeration. The fertility of the fields certainly varies very much; but, when it is considered that the land in the Philippines is never fertilized, but depends, for the maintenance of its vitality, exclusively upon the overflowing of the mud which is washed down from the mountains, it may be believed that the first numbers better express the true

[^70]average. In Java the harvest, in many provinces, amounts to only 50 cavanes per quiñon; in some, indeed, to three times this amount; and in China, with the most careful culture and abundant manure, to 180 cabanes.* Besides rice, they cultivate the camote (sweet potato, Convolvulus batatas). This flourishes like a weed; indeed, it is sometimes planted for the purpose of eradicating the weeds from soil intended for coffee or cacao. It spreads out into a thick carpet, and is an inexhaustible storehouse to its owner, who, the whole year through, can supply his wants from his field. Gabi (Caladium), Ubi (Dioscorea), maize, and other kinds of grain, are likewise cultivated.

After the rice harvest the carabaos, horses, and bullocks, are allowed to graze in the fields. During the rice culture they remain in the gogonales, cane-fields which arise in places once cultivated for mountain-rice and afterwards abandoned. (Gogo is the name of a cane 7 to 8 feet high, Saccharum sp.). Transport then is almost impossible, because during the rainy season the roads are impassable, and the cattle find nothing to eat. The native does not feed his beast, but allows it to die when it cannot support itself. In the wet season of the year it frequently happens that a carabao falls down from starvation whilst drawing a cart. A carabao costs from $\$ 7$ to $\$ 10$; a horse $\$ 10$ to $\$ 20$; and a cow $\$ 6$ to $\$ 8$. Very fine horses are valued at from $\$ 30$ to $\$ 50$, and occasionally as much as $\$ 80$; but the native horses are not esteemed in Manila, because they have no stamina. The bad water, the bad hay, and the great heat of the place at once point out the reason; otherwise it would be profitable to export horses in favorable seasons to Manila, where they would fetch twice their

[^71]value. According to Morga, there were neither horses nor asses on the Island until the Spaniards imported them from China and New Spain.* They were at first small and vicious. Horses were imported also from Japan, "not swift but powerful, with large heads and thick manes, looking like Friesland horses;" $\dagger$ and the breed improved rapidly. Those born in the country, mostly cross-breeds, drive well.

Black cattle.

Sheep.

Black cattle are generally in the hands of a few individuals; some of whom in Camarines possess from 1000 to 3000 head; but they are hardly saleable in the province, although they have been exported profitably for some years past to Manila. The black cattle of the province are small but make good beef. They are never employed for labor, and the cows are not milked. The Filipinos, who generally feed on fish, crabs, mussels, and wild herbs together with rice, prefer the flesh of the carabao to that of the ox; but they eat it only on feastdays.

The old race of sheep, imported by the Spaniards previous to this century, still flourishes and is easily propagated. Those occasionally brought from Shanghai and Australia are considered to be deficient in endurance, unfruitful, and generally short-lived. Mutton is procurable every day in Manila; in the interior, however, at least in the eastern provinces, very rarely; although the rearing of sheep might there be carried on without difficulty, and in many places most profitably; the people being too idle to take care of the young lambs, which they complain are torn to pieces by the dogs

[^72]when they wander about free. The sheep appear to have been acclimatized with difficulty. Morga says that they were brought several times from New Spain, but did not multiply; so that in his time this kind of domestic animal did not exist. Pork is eaten by wealthy Europeans only when the hog has been brought up from the litter at home. In order to prevent its wandering away, it is usually enclosed in a wide meshed cylindrical hamper of bamboo, upon filling which it is slaughtered. The native hogs are too nauseous for food, the animals maintaining themselves almost entirely on ordure.

Crawfurd observes that the names of all the domestic animals in the Philippines belong to foreign languages.

Guesses at history from language. Those of the dog, swine, goat, carabao, cat, even of the fowl and the duck, are Malay or Javanese; while those of the horse, ox, and sheep, are Spanish. Until these animals were first imported from Malaysia, the aborigines were less fortunate in this respect than the Americans, who at least had the alpaca, llamanda, vicuña. The names likewise of most of the cultivated plants, such as rice, yams, sugar-cane, cacao and indigo, are said to be Malay, as well as those for silver, copper, and tin. Of the words relating to commerce, one-third are Malay; to which belong most of the terms used in trades, as well as the denominations for weights and measures, for the calendar-so far as it exists-and for numbers, besides the words for writing, reading, speaking, and narrative. On the other hand, only a small number of terms which refer to war are borrowed from the Malay.

Referring to the degree of civilization which the Philippines possessed previous to their intercourse with the Malays, Crawfurd concludes from the purely domestic words that they cultivated no corn, their vegetable food consisting of batata (?) and banana. They had not a single domestic animal; they were acquainted with
iron and gold, but with no other metal, and were clothed in stuffs of cotton and alpaca, woven by themselves. They had invented a peculiar phonetic alphabet; and their religion consisted in the belief in good and evil spirits and witches, in circumcision, and in somewhat of divination by the stars. They therefore were superior to the inhabitants of the South Sea, inasmuch as they possessed gold, iron, and woven fabrics, and inferior to them in that they had neither dog, pig, nor fowl.

Assuming the truth of the above sketch of preChristian culture, which has been put together only with the help of defective linguistic sources, and comparing it with the present, we find, as the result, a considerable progress, for which the Philippines are indebted to the Spaniards. The influence of social relations has been already exhibited in the text. The Spaniards have imported the horse, the bullock, and the sheep; maize, coffee, sugar-cane, cacao, sesame, tobacco, indigo, many fruits, and probably the batata, which they met with in Mexico under the name of camotli.* From this circumstance the term camote, universal in the Philippines, appears to have had its origin, Crawfurd, indeed, erroneously considering it a native term. According to a communication from Dr. Witmack, the opinion has lately been conceived that the batata is indigenous not only to America, but also to the East Indies, as it has two names in Sanscrit, sharkarakanda and ruktaloo.

Slight industrial progress.

Rice and abaca exported.

With the exception of embroidery, the natives have made but little progress in industries, in the weaving and the plaiting of mats; and the handicrafts are entirely carried on by the Chinese.

The exports consist of rice and abaca. The province exports about twice as much rice as it consumes; a large

[^73]quantity to Albay, which, less adapted for the cultivation of rice, produces only abaca; and a fair share to North Camarines, which is very mountainous, and little fertile. The rice can hardly be shipped to Manila, as there is no high road to the south side of the province, near to the principal town, and the transport by water from the north side, and from the whole of the eastern portion of Luzon, would immediately enhance the price of the product. The imports are confined to the little that is imported by Chinese traders. The traders are almost all Chinese, who alone possess shops in which clothing materials and woolen stuffs, partly of native and partly of European manufacture, women's embroidered slippers, and imitation jewelry, may be obtained. The whole amount of capital invested in these shops certainly does not exceed $\$ 200,000$. In the remaining pueblos of Camarines there are no Chinese merchants; and the inhabitants are consequently obliged to get their supplies from Naga.

The land belongs to the State, but is let to any one who will build upon it. The usufruct passes to the children, and ceases only when the land remains unemployed for two whole years; after which it is competent for the executive to dispose of it to another person. Every family possesses its own house; and the young Homes. husband generally builds with the assistance of his friends. In many places it does not cost more than four or five dollars, as he can, if necessary, build it himself free of expense, with the simple aid of the forestknife (bolo), and of the materials to his hand, bamboo, Spanish cane, and palm-leaves. These houses, which are always built on piles on account of the humidity of the soil, often consist of a single shed, which serves for all the uses of a dwelling, and are the cause of great laxity and of filthy habits, the whole family sleeping
therein in common, and every passer-by being a welcome guest. A fine house of boards for the family of a cabeza perhaps costs nearly $\$ 100$; and the possessions of such a family in stock, furniture, ornaments, etc. (of which they are obliged to furnish an annual inventory), would range in value between $\$ 100$ and $\$ 1,000$. Some reach even as much as $\$ 10,000$, while the richest family of the whole province is assessed at $\$ 40,000$.

In general it may be said that every pueblo supplies its own necessaries, and produces little more. To the indolent native, especially to him of the eastern provinces, the village in which he was born is the world; and he leaves it only under the most pressing circumstances. Were it otherwise even, the strictness of the poll-tax would place great obstacles in the way of gratifying the desire for travel, generated by that oppressive impost.
Meals.
The Filipino eats three times a day-about 7 a. m., 12 , and at 7 or 8 in the evening. Those engaged in severe labor consume at each meal a chupa of rice; the common people, half a chupa at breakfast, one at midday, and half again in the evening, altogether two chupas. Each family reaps its own supply of rice, and preserves it in barns, or buys it winnowed at the market; in the latter case purchasing only the quantity for one day or for the individual meals. The average retail price is 3 cuartos for 2 chupas ( 14 chupas for 1 real). To free it from the husk, the quantity for each single meal is rubbed in a mortar by the women. This is in accordance with an ancient custom; but it is also due to the fear lest, otherwise, the store should be too quickly consumed. The rice, however, is but half cooked; and it would seem that this occurs in all places where it constitutes an essential part of the sustenance of the people, as may be seen, indeed, in Spain and Italy. Salt and much Spanish pepper (capsicum) are eaten
as condiments; the latter, originally imported from America, growing all round the houses. To the common cooking-salt the natives prefer a so-called rock-salt, which they obtain by evaporation from sea-water previously filtered through ashes; and of which one chinanta ( 12 lbs. German) costs from one and one-half to two reals. The consumption of salt is extremely small.

The luxuries of the Filipinos are buyo* and cigars- Buyo and a cigar costing half a centavo, and a buyo much less. cigars Cigars are rarely smoked, but are cut up into pieces, and chewed with the buyo. The women also chew buyo and tobacco, but, as a rule, very moderately; but they do not also stain their teeth black, like the Malays; and the young and pretty adorn themselves assiduously with veils made of the areca-nut tree, whose stiff and closely packed parallel fibers, when cut crosswise, form excellent tooth-brushes. They bathe several times daily, and surpass the majority of Europeans in cleanliness. Every native, above all things, keeps a fightingcock; even when he has nothing to eat, he finds money for cock-fighting.

The details of domestic economy may be summarized as follows:

For cooking purposes an earthen pot is used, costing between 3 and 10 cuartos; which, in cooking rice, is closed firmly with a banana-leaf, so that the steam of a very small quantity of water is sufficient. No other cooking utensils are used by the poorer classes; but those better off have a few cast-iron pans and dishes. In the smaller houses, the hearth consists of a portable earthen pan or a flat chest, frequently of an old cigar-

[^74]chest full of sand, with three stones which serve as a tripod. In the larger houses it is in the form of a bedstead, filled with sand or ashes, instead of a mattress. The water in small households is carried and preserved in thick bamboos. In his bolo (forest-knife), moreover, every one has an universal instrument, which he carries in a wooden sheath made by himself, suspended by a cord of loosely-twisted bast fibers tied round his body. This, and the rice-mortar (a block of wood with a suitable cavity), together with pestles and a few baskets, con- stitute the whole of the household furniture of a poor family; sometimes a large snail, with a rush wick, is also to be found as a lamp. They sleep on a mat of pandanus (fan-palm, Corypha), when they possess one; if not, on the splittings of bamboo, with which the house is floored. By the poor oil for lighting is rarely used; but torches of resin, which last a couple of days, are bought in the market for half a cuarto.

Their clothing requirements I ascertained to be these: A woman wears a camisa de guinára (a short shift of abacá fiber), a patadíon (a gown reaching from the hip to the ancles), a cloth, and a comb. A piece of guinára, costing 1 real, gives two shifts; the coarsest patadín costs 3 reals; a cloth, at the highest, 1 real; and a comb, 2 cuartos; making altogether 4 reals, 12 cuartos. Women of the better class wear a camisa, costing between 1 and 2 r., a patadíon 6 r., cloth between 2 and 3 r., and a comb 2 cu . The men wear a shirt, 1 r ., hose, 3 r., hat (tararura) of Spanish cane, 10 cu., or a salacot (a large rain-hat, frequently decorated), at least 2 r .-often, when ornamented with silver, as much as $\$ 50$. At least three, but more commonly four, suits are worn out yearly; the women, however, taking care to weave almost the whole quantity for the family themselves.

The daily wages of the common laborer are 1 real, without food; and his hours of work are from 6 to 12 , and from 2 to 6 o'clock. The women, as a rule, perform no field labor, but plant out the rice and assist in the reaping; their wages on both occasions being equal to those of the men. Wood and stone-cutters receive 1.5 r . per day, and calkers 1.75 r .

The Tercio is a pretty general contract in the cultivaLand leases. tion of the land. The owner simply lets arable land for the third part of the crop. Some mestizos possess several pieces of ground; but they are seldom connected together, as they generally acquire them as mortgages for sums bearing but a small proportion to their real value.

Under the head of earnings I give the income of a small family. The man earns daily one real, and the woman, if she weaves coarse stuff, one-fourth real, and her food (thus a piece of guinára, occupying the labor of two days, costs half a real in weavers' wages). The most skilful female weaver of the finer stuffs obtains twelve reals per piece; but it takes a month to weave; and the month, on account of the numerous holy-days, must be calculated at the most as equal to twenty-four working days; she consequently earns one-fourth real per day and her food. For the knitting of the fibers of the ananas for the piña web (called sugot) she gets only an eighth of a real and her food.

In all the pueblos there are schools. The schoolmaster Schools. is paid by the Government, and generally obtains two dollars per month, without board or lodging. In large pueblos the salary amounts to three dollars and a half; out of which an assistant must be paid. The schools are under the supervision of theecclesiastics of the place. Reading and writing are taught, the writing copies being Spanish. The teacher, who has to teach his scholars Spanish exactly, does not understand it him-
self, while the Spanish officers, on the other hand, do not understand the language of the country; and the priests have no inclination to alter this state of things, which is very useful to them as a means of influence. Almost the only Filipinos who speak Spanish are those who have been in the service of Europeans. A kind of religious horn-book is the first that is read in the language of the country (Bicol); and after that comes the Christian Doctrine, the reading-book called Casayayan. On an average, half of all the children go to school, generally from the seventh to the tenth year. They learn to read a little; a few even write a little: but they soon forget it again. Only those who are afterwards employed as clerks write fluently; and of these most write well.

Some priests do not permit boys and girls to attend the same school; and in this case they pay a second teacher, a female, a dollar a month. The Filipinos learn arithmetic very quickly, generally aiding themselves by the use of mussels or stones, which they pile in little heaps before them and then count through.
Marriage age.
The women seldom marry before the fourteenth year, twelve years being the legal limit. In the church-register of Polángui I found a marriage recorded (January, 1837) between a Filipino and a Filipina having the ominous name of Hilaria Concepción, who at the time of the performance of the marriage ceremony was, according to a note in the margin, only nine years and ten months old. Frequently people live together unmarried, because they cannot pay the expenses of the ceremony.*
Wuman's work. European females, and even mestizas, never seek husbands amongst the natives. The women generally are well treated, doing only light work, such as sewing,

[^75]weaving, embroidery, and managing the household; while all the heavy labor, with the exception of the beating of the rice, falls to the men.*

Instances of longevity are frequent amongst the $A$ patriarch. Filipinos, particularly in Camarines. The Diario de Manila, of March 13th, 1866, mentions an old man in Darága (Albay) whom I knew well-Juan Jacob, born in 1744, married in 1764, and a widower in 1845. He held many public posts up to 1840 , and had thirteen children, of whom five are living. He has one hundred and seventy direct descendants, and now, at one hundred and twenty-two years of age, is still vigorous, with good eyes and teeth. Extreme unction was administered to him seven times!

The first excretion of a new-born child is carefully preserved, and under the name of triaca (theriacum) is

Snake bite and rabies remedy. held to be a highly efficacious and universal remedy for the bites of snakes and mad dogs. It is applied to the wound externally, and at the same time is taken internally.

A large number of children die in the first two weeks after birth. Statistical data are wanting; but, according to the opinion of one of the first physicians in Manila, at least one-fourth die. This mortality must arise from great uncleanliness and impure air; since in the chambers of the sick, and of women lying-in, the doors and windows are so closely shut that the healthy become sick from the stench and heat, and the sick recover with difficulty. Every aperture of the house is closed up by the husband early during travail, in order that Patianac may not break in-an evil spirit who brings mischief to lying-in women, and endeavors to hinder the birth. The custom has been further maintained even amongst many who

[^76]Infant mortality

The itch.

Imitationmania.

The sickness in Siberia.
attach no belief to the superstition, but who, from fear of a draught of air through a hole, have discovered a new explanation for an old custom-namely, that instances of such practices occur amongst all people. One very the assurance of the physician above referred to, it may be easily subdued; and, according to the judgment of those who are not physicians and who employ that term for any eruptions of the skin, the natives generally live on much too low a diet; the Bicols even more than the Tagalogs.* Under certain conditions, which the physicians, on being questioned, could not define more precisely, the natives can support neither hunger nor thirst; of which fact I have on many occasions been a witness. It is reported of them, when forced into such a situation as to suffer from unappeased wants, that they become critically ill; and thus they often die.

Hence arises the morbid mania for imitation, which is called in Java Sakit-latar, and here Mali-mali. In Java many believe that the sickness is only assumed, because those who pretend to be afflicted with it find it to their advantage to be seen by newly arrived Europeans. Here, however, I saw one instance where indeed no simulation could be suspected. My companions availed themselves of the diseased condition of a poor old woman who met us in the highway, to practice some rough jokes upon her. The old woman imitated every motion as if impelled by an irresistible impulse, and expressed at the same time the most extreme indignation against those who abused her infirmity.
In R. Maak's "Journey to the Amour," it is re- corded:-"It is not unusual for the Maniagri to suffer also from a nervous malady of the most peculiar kind, with

[^77]which we had already been made acquainted by the descriptions of several travellers.* This malady is met with, for the most part, amongst the wild people of Siberia, as well as amongst the Russians settled there. In the district of the Jakutes, where this affliction very frequently occurs, those affected by it, both Russians and Jakutes, are known by the name of 'Emiura;' but here (that is, in that part of Siberia where the Maniagri live) the same malady is called by the Maniagri 'Olon,' and by the Argurian Cossacks 'Olgandshi.' The attacks of the malady which I am now mentioning consist in this, that a man suffering from it will, if under the influence of terror or consternation, unconsciously, and often without the smallest sense of shame, imitate everything that passes before him. Should he be offended, he falls into a rage, which manifests itself by wild shrieks and raving; and he precipitates himself at the same time, with a knife or any other object which may fall to his hand, upon those who have placed him in this predicament. Amongst the Maniagri, women, especially the very aged, are the chief sufferers from this malady; and instances, moreover, of men who were affected by it are likewise known to me. It is worthy of remark that those women who returned home on account of this sickness were notwithstanding strong, and in all other respects enjoyed good health."

Probably it is only an accidental coincidence that in the Malay countries Sakit-latar and Amok exist

Running amuck. together, if not in the same individual, yet amongst the same people. Instances of Amok seem to occur also in the Philippines. $\dagger$ I find the following account in the Diario de Manila of February 21, 1866: In

[^78]Regard for the sleeping.

Cavite, on February 18, a soldier rushed into the house of a school-teacher, and, struggling with him, stabbed him with a dagger, and then killed the teacher's son with a second stab. Plunging into the street, he stabbed two young girls of ten and twelve years of age and wounded a woman in the side, a boy aged nine in the arm, a coachman (mortally) in the abdomen, and, besides another woman, a sailor and three soldiers; and arriving at his barracks, where he was stopped by the sentry, he plunged the dagger into his own breast.

It is one of the greatest insults to stride over a sleeping native, or to awaken him suddenly. They rouse one another, when necessity requires, with the greatest circumspection and by the slowest degrees.*

The sense of smell is developed amongst the natives to so great a degree that they are able, by smelling at the pocket-handkerchiefs, to tell to which persons they belong ("Reisesk.," p. 39); and lovers at parting exchange pieces of the linen they may be wearing, and during their separation inhale the odor of the beloved being, besides smothering the relics with kisses. $\dagger$

## XV

A scientific priest-poet

From Naga I visited the parish priest of Libmanan (Ligmanan), who, possessing poetical talent, and having the reputation of a natural philosopher, collected and

[^79]named pretty beetles and shells, and dedicated the most elegant little sonnets. He favored me with the following narrative:-

In 1851, during the construction of a road a little beyond Libmanan, at a place called Poro, a bed of shells was dug up under four feet of mould, one hundred feet distant from the river. It consisted of Cyrenæ (C. suborbicularis, Busch.), a species of bivalve belonging. to the family of Cyclades which occurs only in warm waters, and is extraordinarily abundant in the brackish waters of the Philippines. On the same occasion, at the depth of from one and a half to three and a half feet, were found numerous remains of the early inhabitantsskulls, ribs, bones of men and animals, a child's thighbone inserted in a spiral of brass wire, several stags' horns, beautifully-formed dishes and vessels, some of them painted, probably of Chinese origin; striped bracelets, of a soft, gypseous, copper-red rock, gleaming as if they were varnished;* small copper knives, but no iron utensils; and several broad flat stones bored through the middle; $\dagger$ besides a wedge of petrified wood, embedded in a cleft branch of a tree. The place, which to this day may be easily recognized in a hollow, might, by excavation systematically carried on, yield many more interesting results. What was not immediately useful was then and there destroyed, and the remainder dispersed. In spite of every endeavor, I could obtain, through the kindness of Señor Fociños in Naga, only one small vessel. Similar remains of more primitive

[^80]inhabitants have been found at the mouth of the Bigajo, not far from Libmánan, in a shell-bed of the same kind; and an urn, with a human skeleton, was found at the mouth of the Perlos, west of Sitio de Poro, in 1840. At the time when I wrote down these statements of the priest, neither of us was familiar with the discoveries made within the last few years relating to the lake dwellings (pile villages); or these notes might have been more exact, although probably they would not have been so easy and natural.

Ancient Chinese jur.

Used as tea canisters.

Mr. W. A. Franks, who had the kindness to examine the vessel, inclines to the opinion that it is Chinese, and pronounces it to be of very great antiquity, without, however, being able to determine its age more exactly; and a learned Chinese of the Burlingame Embassy expressed himself to the same effect. He knew only of one article, now in the British Museum, which was brought from Japan by Kaempfer, the color, glazing, and cracks in the glazing, of which (craqueles) corresponded precisely with mine. According to Kaempfer, the Japanese found similar vessels in the sea; and they value them very highly for the purpose of preserving their tea in them.

Morga writes:-
"On this island, Luzon, particularly in the provinces of Manila, Pampánga, Pangasinán, and Ilócos, very ancient clay vessels of a dark brown color are found by the natives, of a sorry appearance; some of a middling size, and others smaller; marked with characters and stamps. They are unable to say either when or where they obtained them; but they are no longer to be acquired, nor are they manufactured in the islands. The Japanese prize them highly, for they have found that the root of a herb which they call Tscha (tea), and which when drunk hot is considered as a great delicacy and of medicinal efficacy by the kings and lords in Japan, cannot be effectively preserved except in these vessels; which
are so highly esteemed all over Japan that they form the most costly articles of their show-rooms and cabinets. Indeed, so highly do they value them that they overlay them externally with fine gold embossed with great skill, and enclose them in cases of brocade; and some of these vessels are valued at and fetch from two thousand tael to eleven reals. The natives of these islands purchase them from the Japanese at very high rates, and take much pains in the search for them on account of their value, though but few are now found on account of the eagerness with which they have been sought for."

When Carletti, in 1597, went from the Philippines to Japan, all the passengers on board were examined carefully, by order of the governor, and threatened with capital punishment if they endeavored to conceal "certain earthen vessels which were wont to be brought from the Philippines and other islands of that sea," as the king wished to buy them all.
"These vessels were worth as much as five, six, and even ten thousand scudi each; but they were not permitted to demand for them more then one Giulio (about a half Paolo)." In 1615 Carletti met with a Franciscan who was sent as ambassador from Japan to Rome, who assured him that he had seen one hundred and thirty thousand scudi paid by the King of Japan for such a vessel; and his companions confirmed the statement. Carletti also alleges, as the reason for the high price, "that the leaf cia or tea, the quality of which improves with age, is preserved better in those vessels than in all others. The Japanese besides know these vessels by certain characters and stamps. They are of great age and very rare, and come only from Cambodia, Siam, CochinChina, the Philippines, and other neighboring islands. From their external appearance they would be estimated at three or four quatrini (two dreier)...... It is perfectly true that the king and the princes of that kingdom possess a very large number of these vessels, and prize Japanese.
them as their most valuable treasure and above all other rarities.... and that they boast of their acquisitions, and from motives of vanity strive to outvie one another in the multitude of pretty vessels which they possess."*

Found in Borneo
$\$ 3,500$ for a jar

Many travellers mention vessels found likewise amongst the Dyaks and the Malays in Borneo, which, from superstitious motives, were estimated at most exaggerated figures, amounting sometimes to many thousand dollars.

St. John $\dagger$ relates that the Datu of Tamparuli (Borneo) gave rice to the value of almost $\$ 3,500$ for a jar, and that he possessed a second jar of almost fabulous value, which was about two feet high, and of a dark olive green. The Datu fills both jars with water, which, after adding plants and flowers to it, he dispenses to all the sick persons in the country. But the most famous jar in Borneo is that of the Sultan of Brunei, which not only possesses all the valuable properties of the other jars but can also speak. St. John did not see it, as it is always kept in the women's apartment; but the sultan, a credible man, related to him that the jar howled dolefully the night before the death of his first wife, and that it emitted similar tones in the event of impending misfortunes. St. John is inclined to explain the mysterious phenomenon by a probably peculiar form of the mouth of the vessel, in passing over which the air-draught is thrown into resonant verberations, like the Aeolian harp. The vessel is generally enveloped in gold brocade, and is uncovered only when it is to be consulted; and hence, of course, it happens that it speaks only on solemn occasions. St. John states further that

[^81]the Bisayans used formerly to bring presents to the sultan; in recognition of which they received some water from the sacred jar to sprinkle over their fields and thereby ensure plentiful harvests. When the sultan was asked whether he would sell his jar for $\$ 100,000$, he answered that no offer in the world could tempt him to part with it. -

Morga's description suits neither the vessel of Libmánan nor the jar of the British Museum, but rather a vessel brought from Japan a short time ago to our Ethnographical Museum. This is of brown clay, small but of graceful shape, and composed of many pieces cemented together; the joints being gilt and forming a kind of network on the dark ground. How highly ancient pots of a similar kind, even of native origin, are esteemed in Japan down to the present day, is shown by the following certificate translated by the interpreter of the German Consulate:-
"This earthen vessel was found in the porcelain factory of Tschisuka in the province of Odori, in South Idzumi,

A consecrated
jar. and is an object belonging to the thousand graves . It was made by Giogiboosat (a celebrated Buddhist priest), and after it had been consecrated to heaven was buried by him. According to the traditions of the people, this place held grave mounds with memorial stones. That is more than a thousand years ago. ...... In the pursuit of my studies, I remained many years in the temple Sookuk, of that village, and found the vessel. I carried it to the high priest Shakudjo, who was much delighted therewith and always bore it about with him as a treasure. When he died it fell to me, although I could not find it. Recently, when Honkai was chief priest, I saw it again, and it was as if I had again met the spirit of Shakudjo. Great was my commotion, and I clapped my hands with astonishment; and, as

Morga's description.
often as I look upon the treasure, I think it is a sign that the spirit of Shakudjo is returned to life. Therefore I have written the history, and taken care, of this treasure. -Fudji Kuz Dodjin."

Baron Alexander von Siebold communicates the fol-lowing:-

Tea socicties

Their object.

Ceremonies.

The value which the Japanese attach to vessels of this kind rests upon the use which is made of them by the mysterious tea societies called Cha-no-yu. Respecting the origin of these societies, which still are almost entirely unknown to Europeans, different legends exist. They flourished, however, principally during the reign of the emperor Taikosama, who, in the year 1588, furnished the society of Cha-no-yu at Kitano near Myako with new laws. In consequence of the religious and civil wars, the whole of the people had deteriorated and become ungovernable, having lost all taste for art and knowledge, and holding only rude force in any esteem; brute strength ruling in the place of the laws. The observant Taikosama perceived that, in order to tame these rough natures, he must accustom them to the arts of peace, and thus secure prosperity to the country, and safety for himself and his successors. With this in view he recalled the Cha-no-yu society anew into life, and assembled its masters and those acquainted with its customs around him.

The object of the Cha-no-yu is to draw man away from the influences of the terrestrial forces which surround him, to plant within him the feeling of complete repose, and to dispose him to self-contemplation. All the exercises of the Cha-no-yu are directed to this object.

Clothed in light white garments, and without weapons, the members of the Cha-no-yu assemble round the master's house, and, after resting some time in the ante-room, are conducted into a pavilion appropriated exclusively to these assemblies. This consists of the most costly kinds of wood, but is without any ornament which could possibly be abstracted from it; without color, and without varnish, dimly lighted by small windows thickly overgrown with plants, and so low that it is impossible
to stand upright. The guests tread the apartment with solemn measured steps, and, having been received by him according to the prescribed formulas, arrange themselves in a half-circle on both sides of him. All distinctions of rank are abolished. The ancient vessels are now removed with solemn ceremonies from their wrappings, saluted and admired; and, with the same solemn and rigidly prescribed formulas, the water is heated on the hearth appropriated to the purpose, and the tea taken from the vessels and prepared in cups. The tea consists of the young green leaves of the teashrub rubbed to powder, and is very stimulating in its effect. The beverage is taken amidst deep silence, while incense is burning on the elevated pedestal of honor, toko; and, after the thoughts have thus been collected, conversation begins. It is confined to abstract subjects; but politics are not always excluded.

The value of the vessels employed in these assemblages is very considerable; indeed, they do not fall short of the value of our most costly paintings; and Taikosama often rewarded his generals with vessels of the kind, instead of land, as was formerly the practice. After the last revolution some of the more eminent Daimios (princes) of the Mikado were rewarded with similar Cha-no-yu vessels, in acknowledgment of the aid rendered to him in regaining the throne of his ancestors. The best of them which I have seen were far from beautiful, simply being old, weather-worn, black or dark-brown jars, with pretty broad necks, for storing the tea in; tall cups of cracked Craquelé, either porcelain or earthenware, for drinking the infusion; and deep, broad cisterns; besides rusty old iron kettles with rings, for heating the water: but they were enwrapped in the most costly silken stuffs, and preserved in chests lacquered with gold. Similar old vessels are preserved amongst the treasures of the Mikado and the Tycoon, as well as in some of the temples, with all the care due to the most costly jewels, together with documents relating to their history.

Yamtik and Visita Bicul.

Ant Act ivities.

Superstitions.

From Libmánan I visited the mountain, Yamtik (Amtik, Hantu),* which consists of lime, and contains many caverns. Six hours westward by water, and one hour S.S.W. on foot, brought us to the Visita Bícul, surrounded by a thousand little limestone hills; from which we ascended by a staircase of sinter in the bed of a brook, to a small cavern tenanted by multitudes of bats, and great long-armed spiders of the species Phrynus, known to be poisonous. $\dagger$

A thick branch of a tree lying across the road was perforated from end to end by a small ant. Many of the natives did not venture to enter the cave; and those who did enter it were in a state of great agitation, and were careful first to enjoin upon each other the respect to be observed by them towards Calapnitan. $\ddagger$

One of the principal rules was to name no object in the cave without adding "Lord Calapnitan's." Thus they did not bluntly refer to either gun or torch, but devoutly said "Lord C.'s gun," or "Lord C.'s torch." At a thousand paces from this lies another cave, "San Vicente," which contains the same insects, but another kind of bat. Both caves are only of small extent; but in Libmánan a very large stalactite cave was mentioned to me, the description of which, notwithstanding the fables mixed up with it, could not but have a true foundation. Our guides feigned ignorance of it; and it was not till after two days' wandering about, and after many debates, that they came to the decision, since I adhered to my purpose, to encounter the risk; when, to my great astonishment, they conducted me back to Calapnitan's

[^82]cave; from which a narrow fissure, hidden by a projection of rock, led into one of the most gorgeous stalactite caves in the world. Its floor was everywhere firm and easy to the tread, and mostly dry; and it ran out into several branches, the entire length of which probably exceeds a mile; and the whole series of royal chambers and cathedrals, with the columns, pulpits, and altars which it contained, reflected no discredit upon its description. No bones or other remains were to be found in it. My intention to return subsequently with laborers, for the purpose of systematic excavation, was not carried out.

I was not lucky enough to reach the summit of the mountain, upon which was to be found a lake, "from

Unsuccessful climb. where else should the water come?" For two days we labored strenuously at different points to penetrate the thick forest; but the guide, who had assured the priest in Libmanan that he knew the road, now expressed himself to the contrary effect. I therefore made the fellow, who had hitherto been unburdened, now carry a part of the baggage as a punishment; but he threw it off at the next turning of the road and escaped, so that we were compelled to return. Stags and wild boars are very numerous in these forests; and they formed the principal portion of our meals, at which, at the commencement of our expedition, we had as many as thirty individuals; who, in the intervals between them, affected to search for snails and insects for me, but with success not proportionate to their zeal.

Upon my departure from Daraga I took with me a lively little boy, who had a taste for the calling of a naturalist. In Libmanan he was suddenly lost, and with him, at the same time, a bundle of keys; and we looked for him in vain. The fact was, as I afterwards came to learn, that he went straight to Naga, and,

Trip with Internal Revenue Collector
identifying himself by showing the stolen keys, got the majordomo of my host to deliver to him a white felt hat; with which he disappeared. I had once seen him, with the hat on his head, standing before a lookingglass and admiring himself; and he could not resist the temptation to steal it.
In the beginning of March I had the pleasure of accompanying the Collector (Administrador) of Camarines and a Spanish head-man, who were travelling across Daet and Mauban to the chief town. At five p. m. we left Butungan on the Bicol River, two leagues below Naga, in a falúa of twelve oars, equipped with one 6 -pounder and two 4 -pounders, and reinforced by armed men; and about six we reached Cabusao, at the mouth of the Bicol, whence we put to sea about nine. The falua belonged to the collector of taxes, and had, in conjunction with another under the command of the alcalde, to protect the north coast of the province against smugglers and pirates, who at this time of the year are accustomed to frequent the hiding-places of the bay of San Miguel. Two similar gun-boats performed the duty on the south coast of the province.

Both the banks of the Bicol River are flat, and expand into broad fields of rice; and to the east are simultaneously visible the beautiful volcanos of Mayon, Iriga, Malina, and Isarog.

At daybreak we reached the bar of Daet, and, after two hours' travelling, the similarly named chief city of the province of North Camarines, where we found an excellent reception at the house of the alcalde, a polished Navarrese; marred only by the tame monkey, who should have welcomed the guests of his master, turning his back towards them with studiously discourteous gestures, and going towards the door. However, upon the majordomo placing a spirit flask preserving
a small harmless snake on the threshold, the monkey sprang quickly back and concealed himself, trembling, behind his master. In the evening there was a ball, but there were no dancers present. Some Filipinas, who had been invited, sat bashfully at one end of the apartment and danced with one another when called upon, without being noticed by the Spaniards, who conversed together at the other end.

Our departure hence was delayed by festivities and sudden showers for about two days, after which the spirited horses of the alcalde carried us within an hour on a level road north-west, to Talisáy, and in another hour to Indang, where a bath and breakfast were ready. Up to this time I had never seen a bath-room in the house of a Spaniard; whereas with the Northern Europeans it is never wanting. The Spaniards appear to regard the bath as a species of medicine, to be used only with caution; many, even to the present day, look upon it as an institution not quite Christian. At the time of the Inquisition frequent bathing, it is known, was a characteristic of the Moors, and certainly was not wholly free from danger. In Manila, only those who live near the Pasig are the exceptions to the rule; and there the good or bad practice prevails of whole families bathing, in the company of their friends, in the open air.

The road ends at Indáng. In two boats we went down the river till stopped by a bar, and there at a well-supplied table prepared for us by the kindness of the alcalde we awaited the horses which were being brought thither along a bad road by our servants. In the waste of Barre a tower, surrounded by two or three fishermen's huts and as many camarines, has been erected against the Moros, who, untempted by the same, seldom go so far westward, for it consists only of an open hut covered with palm-leaves-a kind of parasol-supported on stakes as thick
as one's arm and fifteen feet high; and the two cannons belonging to it ought, for security, to be buried. We followed the sea-shore, which is composed of silicious sand, and covered with a carpet of creeping shore plants in full bloom. On the edge of the wood, to the left, were many flowering shrubs and pandanus with large scarlet-red flowers. After an hour we crossed the river Longos in a ferry, and soon came to the spur of a crystalline chain of mountains, which barred our road and extended itself into the sea as Point Longos. The horses climbed it with difficulty, and we found the stream on the other side already risen so high that we rode kneedeep in the water. After sunset we crossed singly, with great loss of time, in a miserable ferry-boat, over the broad mouth of the Pulundaga, where a pleasant road through a forest led us, in fifteen minutes, over the mountain-spur, Malanguit, which again projected itself right across our path into the sea, to the mouth of the Paracale. The long bridge here was so rotten that we were obliged to lead the horses over at wide intervals apart; and on the further side lies the place called Pa racale, from which my companions continued their journey across Mauban to Manila.
Red lead. Paracale and Mambulao are two localities well known to all mineralogists, from the red lead ore occurring there. On the following morning I returned to Longos; which consists of only a few miserable huts inhabited by goldwashers, who go about almost naked, probably because they are laboring during the greater part of the day in the water; but they are also very poor.
Gold mining.
The soil is composed of rubbish, decomposed fragments of crystalline rock, rich in broken pieces of quartz. The workmen make holes in the ground two and one-half feet long, two and one-half broad, and to thirty feet deep. At three feet below the surface the rock is generally
found to contain gold, the value increasing down to eighteen feet of depth, and then again diminishing, though these proportions are very uncertain, and there is much fruitless search. The rock is carried out of the holes in baskets, on ladders of bamboo, and the water in small pails; but in the rainy season the holes cannot possibly be kept free from water, as they are situated on the slope of the mountain, and are filled quicker than they can be emptied. The want of apparatus for discharging water also accounts for the fact that the pits are not dug deeper.

The breaking of the auriferous rock is effected with two stones; of which one serves as anvil, and the other

A primitive rock breaker. as hammer. The former, which is slightly hollowed in the center, is laid flat upon the ground; and the latter, four by eight by eight inches in dimensions, and therefore of about twenty-five pounds weight, is made fast with rattan to the top of a slender young tree, which lies in a sloping position in a fork, and at its opposite end is firmly fixed in the ground. The workman with a jerk forces the stone that serves for hammer down upon the auriferous rock, and allows it to be again carried upwards by the elasticity of the young tree.

The crushing of the broken rock is effected with an apparatus equally crude. A thick stake rises from the center of a circular support of rough-hewn stones (which is enclosed in a circle of exactly similar stones) having an iron pin at its top, to which a tree, bent horizontally in the middle, and downwards at the two ends, is fixed, Being set in motion by two carabaos attached in front, it drags several heavy stones, which are bound firmly to it with rattans, round the circle, and in this manner crushes the broken rock, which has been previously mixed with water, to a fine mud. The same apparatus is employed by the Mexican gold-washers, under the

Gold-washing.

The clean-up.
name of Rastra. The washing-out of the mud is done by women. They kneel before a small wooden gutter filled with water up to the brim, and provided with boards, sloping downwards, in front of the space assigned to each woman; the gutter being cut out at these places in a corresponding manner, so that a very slender stream of water flows evenly across its whole breadth downwards over the board. With her hand the workwoman distributes the auriferous mud over the board, which, at the lower edge, is provided with a cross-piece; and, when the light sand is washed away, there remains a stratum consisting chiefly of iron, flint, and ore, which is taken up from time to time with a flat piece of board, and laid on one side; and at the end of the day's work, it is washed out in a flat wooden dish (batea), and, for the last time, in a coco-shell; when, if they are lucky, a fine yellow dust shows itself on the edge.* During the last washing the slimy juice of the Gogo is added to the water, the fine heavy sand remaining suspended therein for a longer time than in pure water, and thus being more easily separated from the gold-dust. $\dagger$

It is further to be mentioned that the refuse from the pits is washed at the upper end of the water-gutter, so that the sand adhering to the stones intended for pounding may deposit its gold in the gutter or on the washing-board. In order to melt the gold thus obtained into a lump, in which form it is bought by the dealers, it is poured into a small heart-shell (cardium), and, after being covered with a handful of charcoal, placed

[^83]in a potsherd; when a woman blows through a narrow bamboo-cane on the kindled coals, and in one minute the work is completed.*

The result of many inquiries shows the profit per head to average not more than one and one-half reals daily. Further to the south-west from here, on the mountain Malaguit, are seen the ruins of a Spanish mining company; a heap of rubbish, a pit fifty feet deep, a large house fallen to ruin, and a stream-work four feet broad and six feet high. The mountain consists of gneiss much decomposed, with quartz veins in the stream-work, with the exception of the bands of quartz, which are of almost pure clay earth with sand.

On the sides hung some edible nests of the salangane, but not of the same kind as those found in the caverns on the south coast of Java. These, which are of much less value than the latter, are only occasionally collected by the Chinese dealers, who reckon them nominally at five cents each. We also found a few of the nestbuilding birds (Collocalia troglodytes, Gray). $\dagger$

Around lay so large a number of workings, and there were so many little abandoned pits, wholly or half fallen to ruin, and more or less grown over, that it was necessary to step between with great caution. Some of them

[^84]Lead and mica.

Chrome-lead ore.

A pretty fan-palm.
were still being worked after the mode followed at Lóngos, but with a few slight improvements. The pits are twice as large as those excavated there, and the rock is lifted, up by a pulley to a cylindrical framework of bamboo, which is worked by the feet of a lad who sits on a bank higher up.
Ten minutes north of the village of Malaguit is a mountain in which lead-glance and red lead have been obtained; the rock consisting of micaceous gneiss much decomposed. There is a stream-work over one hundred feet in length. The rock appears to have been very poor.

The highly prized red-lead ores have been found on the top of this same hill, $\mathrm{N} .30^{\circ} \mathrm{W}$. from the village. The quarry was fallen to ruin and flooded with rain, so that only a shallow hollow in the ground remained visible; and after a long search amongst the bushes growing there a few small fragments were found, on which chromelead ore was still clearly to be recognized. Captain Sabino, the former governor of Paracale, a well-informed Filipino, who, at the suggestion of the alcalde, accompanied me, had for some years caused excavations to be carried on, in order to find specimens for a speculator who had in view the establishment of a new mining company in Spain; but the specimens which were found had not been removed, as speculation in mines in the Philippines had, in the interval, fallen into discredit on the Exchange of Madrid; and as yet only a little box full of sand, out of a few small drusy cavities, has been fixed upon and pounded, to be sold as variegated writingsand, after being carefully sifted.

A peculiarly beautiful fan-palm grows on this hill. Its stem is from thirty to forty feet high, cylindrical and dark-brown, with white rings a quarter of an inch broad at distances of four inches, and, at similar inter-
vals, crown-shaped bands of thorns two inches long. Near the crown-leaf the stem passes into the richest brown of burnt sienna.

Notwithstanding a very bad road, a pleasant ride carried us from Paracale to the sea-shore, and, through

Rooming in a powdermagazine. a beautiful wood, to Mambulao, which lies W. by $N$. I alighted at the tribunal, and took up my lodgings in the room where the ammunition was kept, as being the only one that could be locked. For greater security, the powder was stored in a corner and covered with carabao-hide; but such were my arrangements that my servant carried about a burning tallow light, and his assistant a torch in the hand. When I visited the Filipino priest, I was received in a friendly manner by a young girl who, when I offered my hand, thanked me with a bow, saying, "Tengo las sarnas" ("I have the itch"). The malady, which is very common in the Philippines, appears to have its focus in this locality.

A quarter of a league N.N.E. we came upon the ruins of another mining undertaking, the Ancla de Oro. Shaft and water-cutting had fallen in, and were thickly grown over; and only a few of the considerable buildings were still standing; and even those were ready to fall. In a circle some natives were busily employed, in their manner, collecting grains of gold. The rock is gneiss, weathered so much that it cannot be recognized; and at a thousand paces on the other side is a similar one, clearly crystalline.

Half a league N. by E. from Mambulao is the leadmountain of Dinianan. Here also all the works were fallen in, choked with mud and grown over. Only after a long search were a few fragments found with traces of red-lead ore. This mountain consists of hornblende rock; in one place, of hornblende slate, with very beautiful large crystals.

Gneiss and crystalline rock.

Hornblende and hornblende slate.

Copper.

Unsuccessful copper-mining.

Paying minus dividends.

Igorot-mining succesful.

A league and a half S . from Mambulao a shallow hollow in the ground marks the site of an old copper-mine, which must have been eighty-four feet deep. Copper ores are found in several places in Luzon; and specimens of solid copper were obtained by me at the Bay of Luyang, N. of the Enseñada de Patag, in Caramuan.

Very considerable beds of copper ore occur in Mancayán, in the district of Lepanto, and in the central mountain-range of Luzon between Cagayán and Ilocos, which have been worked by a mining company in Manila since 1850; but the operations seem to have been most unsuccessful. In 1867 the society expended a considerable capital in the erection of smelting furnaces and hydraulic machinery; but until a very recent date, owing to local difficulties, particularly the want of roads, it has not produced any copper.*

In 1869 I heard, in London, that the undertaking had been given up. According to my latest information, however, it is certainly in progress; but the management have never, I believe, secured a dividend. The statement of 1872, in fact, shows a loss, or, as the Spaniards elegantly say, a dividendo pasivo.

What Europeans yet appear unable to accomplish, the wild Igorots, who inhabit that trackless range of mountains, have carried on successfully for centuries, and to a proportionally larger extent; and this is the more remarkable as the metal in that district occurs only in the form of flints, which even in Europe can be made profitable only by particular management, and not without expense.

The copper introduced into commerce by the Igorots from 1840 to 1855 , partly in a raw state, partly manufactured, is estimated at three hundred piculs yearly.

[^85]The extent of their excavations, and the large existing masses of slag, also indicate the activity of their operations for a long period of time.

In the Ethnographical Museum at Berlin is a copper kettle made by those wild tribes. Meyer, who brought it, states that it was made by the Negritos in the interior of the island, and certainly with hammers of porphyry, as they have no iron; and that he further found, in the collection of the Captain General of the Philippines, a large shallow kettle of three and one-half feet in diameter, which had been bought for only three dollars; whence it may be inferred that, in the interior of the island, the copper occurs in large masses, and probably solid; for how could those rude, uncultivated negritos understand the art of smelting copper?

The locality of these rich quarries was still unknown to the Governor, although the copper implements brought thence had, according to an official statement of his in 1833, been in use in Manila over two centuries. It is now known that the copper-smiths are not Negritos but Igorots; and there can be no question that they practiced this art, and the still more difficult one of obtaining copper from flint, for a long period perhaps previous to the arrival of the Spaniards. They may possibly have learnt them from the Chinese or Japanese. The chief engineer, Santos*, and many others with him, are of opinion that this race is descended from the Chinese or Japanese, from whom he insists that it acquired not only its features (several travellers mention the obliquely placed eyes of the Igorots), its idols, and some of its customs, but also the art of working in copper. At all events, the fact that a wild people, living isolated in the mountains, should have made such progress in the science of smelting, is of so great interest that a description of their procedure by Santos (essentially only a repetition of an earlier account by Hernandez, in the Revista Minera, i. 112) will certainly be acceptable.

[^86]Copper kettles attributed to Negritos.

Copper-working a pre-Spanish art.

The Igorots' Method.

The present mining district acquired by the society mentioned, the Sociedad Minero-metalurgica Cantabrofilipina de Mancayan, was divided amongst the Igorots into larger or smaller parcels strictly according to the number of the population of the adjacent villages, whose boundaries were jealously watched; and the possessions of each separate village were again divided between certain families; whence it is that those mountain districts exhibit, at the present day, the appearance of a honeycomb. To obtain the ore, they made cavities, in which they lighted fires in suitable spots, for the purpose of breaking the rock into pieces by means of the elasticity of the heated water contained in the crevices, with the additional assistance of iron implements. The first breaking-up of the ore was done in the stream-work itself, and the dead heaps lay piled up on the ground, so that, in subsequent fires, the flame of the pieces of wood always reached the summit; and by reason of the quality of the rock, and the imperfection of the mode of procedure, very considerable down-falls frequently occurred. The ores were divided into rich and quartziferous; the former not being again melted, but the latter being subjected to a powerful and persistent roasting, during which, after a part of the sulphur, antimony, and arsenic had been exhaled, a kind of distillation of sulphate of copper and sulphate of iron took place, which appeared as "stone," or in balls on the surface of the quartz, and could be easily detached.*

\footnotetext{

* According to the Catalogue, the following ores are found:-Variegated copper ore (cobre gris abigarrado), arsenious copper (c. gris arsenical), vitreous copper (c. vitreo), copper pyrites (pirita de cobre), solid copper (mata cobriza), and black copper (c. negro). The ores of most frequent occurrence have the following composition-A, according to an analyzed specimen in the School of Mines at Madrid; B, according to the analysis of Santos, the mean of several specimens taken from different places:-


The furnace or smelting apparatus consisted of a The Smelter. round hollow in clayey gound, thirty centimeters in diameter and fifteen deep; with which was connected a conical funnel of fire-proof stone, inclined at an angle of $30^{\circ}$, carrying up two bamboo-canes, which were fitted into the lower ends of two notched pine-stems; in these two slips, covered all over with dry grass or feathers, moved alternately up and down, and produced the current required for the smelting.

When the Igorots obtained black copper or native Smelting. copper by blasting, they prevented loss (by oxidation) by setting up a crucible of good fire-proof clay in the form of a still; by which means it was easier for them to pour the metal into the forms which it would acquire from the same clay. The furnace being arranged, they supplied it with from eighteen to twenty kilograms of rich or roasted ore, which, according to the repeated experiments of Hernandez, contained twenty per cent of copper; and they proceeded quite scientifically, always exposing the ore at the mouth of the funnel, and consequently to the air-drafts, and placing the coals at the sides of the furnace, which consisted of loose stones piled one over another to the height of fifty centimeters. The fire having been kindled and the blowing apparatus, already described, in operation, thick clouds of white, yellow, and orange-yellow smoke were evolved from the partial volatilization of the sulphur, arsenic, and antimony, for the space of an hour; but as soon as only sulphurous acid was formed, and the heat by this procedure had attained its highest degree, the blowing was discontinued and the product taken out. This consisted of a dross, or, rather, of the collected pieces of ore themselves, which, on account of the flinty contents of the stones composing the funnel, were transformed by the decomposition of the sulphurous metal into a porous
mass, and which could not be converted into dross nor form combinations with silicious acid, being deficient in the base as well as in the requisite heat; and also of a very impure "stone," of from four to five kilograms weight, and containing from fifty to sixty per cent of copper.

Several of these "stones" were melted down together for the space of about fifteen hours, in a powerful fire; and by this means a great portion of the three volatile substances above named was again evolved; after which they placed them, now heated red-hot, in an upright position, but so as to be in contact with the draught; the coals, however, being at the sides of the furnace. After blowing for an hour or half-an-hour, they thus obtained, as residuum, a silicate of iron with antimony and traces of arsenic, a "stone" containing from seventy to seventy-five per cent of copper, which they took off in very thin strips, at the same time using refrigerating vessels; and at the bottom of the hollow there remained, according as the mass was more or less freed from sulphur, a larger or smaller quantity (always, however, impure) of black copper.

The purified stones obtained by this second process were again made red-hot by placing them between rows of wood, in order that they might not melt into one another before the fire had freed them from impurities.

The black copper obtained from the second operation, and the stones which were re-melted at the same time, were then subjected to a third process in the same furnace (narrowed by quarry stones and provided with a crucible); which produced a residuum of silicious iron and black copper, which was poured out into clay moulds, and in this shape came into commerce. This black copper contained from ninety-two to ninety-four per cent of copper, and was tinged by a carbonaceous compound of the same metal known by its yellow color, and
the oxide on the surface arising from the slow cooling, which will occur notwithstanding every precaution; and the surface so exposed to oxidation they beat with green twigs. When the copper, which had been thus extracted with so much skill and patience by the Igorots, was to be employed in the manufacture of kettles, pipes, and other domestic articles, or for ornament, it was submitted to another process of purification, which differed from the preceding only in one particular, that the quantity of coals was diminished and the air-draught increased according as the process of smelting drew near to its termination, which involved the removal of the carbonaceous compound by oxidation. Santos found, by repeated experiment, that even from ores of the mean standard of twenty per cent, only from eight to ten per cent of black copper was extracted by the third operation; so that between eight to twelve per cent still remained in the residuum or porous quartz of the operation.

It was difficult to procure the necessary means of transport for my baggage on the return journey to

Tagalog women traders. Paracale, the roads being so soaked by the continuous rains that no one would venture his cattle for the purpose. In Mambulao the influence of the province on its western border is very perceptible, and Tagalog is understood almost better than Bicol; the Tagalog element being introduced amongst the population by women, who with their families come here, from Lucban and Mauban, in the pursuit of trade. They buy up gold, and import stuffs and other wares in exchange. The gold acquired is commonly from fifteen to sixteen carats, and a mark determines its quality. The dealers pay on the average $\$ 11$ per ounce; but when, as is usually the case, it is

Miners ${ }^{*}$ uncertain returns.

Labo.
offered in smaller quantities than one ounce, only \$10.* They weigh with small Roman scales, and have no great reputation for honesty.

North Camarines is thinly inhabited, the population of the mining districts having removed after the many undertakings which were artificially called into existence by the mining mania had been ruined. The goldwashers are mostly dissolute and involved in debt, and continually expecting rich findings which but very seldom occur, and which, when they do occur, are forthwith dissipated;-a fact which will acount for champagne and other articles of luxury being found in the shops of the very poor villagers.

Malaguit and Matango, during the dry season, are said to be connected by an extremely good road; but, when we passed, the two places were separated by a quagmire into which the horses sank up to their middle.

In Labo, a little village on the right bank of the river Labo (which rises in the mountain of the same name), the conditions to which we have adverted are repeatedvestiges of the works of former mining companies fast disappearing, and, in the midst, little pits being worked by the natives. Red lead has not been found here, but gold has been, and especially "platinum," which some experiments have proved to be lead-glance. The mountain Labo appears from its bell-shape and the strata exposed in the river bed to consist of trachytic hornblende. Half a league W.S.W., after wading through mud a foot deep, we reached the mountain Dallas where lead-glance and gold were formerly obtained by a mining company; and to the present day gold is obtained by a few natives in the usual mode.

[^87]Neither in the latter province, nor in Manila, could I acquire more precise information respecting the histories of the numerous unfortunate mining enterprises. Thus much, however, appears certain, that they were originated only by speculators, and never properly worked with sufficient means. They therefore, of necessity, collapsed so soon as the speculators ceased from their operations.

North Camarines yields no metal with the exception

Wild Cat Mining.

Small output. of the little gold obtained by the natives in so unprofitable a manner. The king of Spain at first received a fifth, and then a tenth, of the produce; but the tax subsequently ceased. In Morga's time the tenth amounted on an average to $\$ 10,000$ ('which was kept quite secret"); the profit, consequently, to above $\$ 100,000$. Gemelli Carreri was informed by the governor of Manila that gold to the value of $\$ 200,000$ was collected annually without the help of either fire or quicksilver, and that Paracale, in particular, was rich in gold. No data exist from which I could estimate the actual rate of produce; and the answers to several inquiries deserve no mention. The produce is, at all events, very small, as well on account of the incompleteness of the mode of procedure as of the irregularity of labor, for the natives work only when they are compelled by necessity.

I returned down the stream in a boat to Indang, a Indang. comparatively flourishing place, of smaller population but more considerable trade than Daet; the export consisting principally of abacâ, and the import of rice.

An old mariner, who had navigated this coast for Storms. many years, informed me that the same winds prevail from Daet as far as Cape Engaño, the north-east point of Luzon. From October to March the north-east wind prevails, the monsoon here beginning with north winds, which are of short duration and soon pass into
the north-east; and in January and February the east winds begin and terminate the monsoon. The heaviest rains fall from October to January, and in October typhoons sometimes occur. Beginning from the north or north-east, they pass to the north-west, where they are most violent; and then to the north and east, sometimes as far as to the south-east, and even to the south. In March and April, and sometimes in the beginning of May, shifting winds blow, which bring in the southwest monsoon; but the dry season, of which April and May are the driest months, is uninterrupted by rain. Thunder storms occur from June to November; most frequently in August. During the south-west monsoon the sea is very calm; but in the middle of the northeast monsoon all navigation ceases on the east coast. In the outskirts of Baler rice is sown in October, and reaped in March and April. Mountain rice is not cultivated.

## XVI

On foot to San Miguel bay.

Sending my baggage from Daet to Cabusao in a schooner, I proceeded on foot, by the road to that place, to the coast on the west side of the Bay of San Miguel. We crossed the mouth of the river in a boat, which the horses swam after; but they were soon abandoned from unfitness. At the mouth of the next river, Sacavin, the water was so high that the bearers stripped themselves naked and carried the baggage over on their heads. In simple jacket and cotton hose, I found this precaution needless; indeed, according to my experience, it is both refreshing and salutary to wear wet clothes, during an uniformly high temperature; besides which, one is thereby spared many a spring over ditches, and
many a roundabout course to avoid puddles, which, being already wet through, we no longer fear. After having waded over eight other little rivers we were obliged to leave the shore and pursue the road to Colasi along steep, slippery, forest paths, the place lying right in the middle of the west side of the bay. The sea-shore was very beautiful. Instead of a continuous and, at the ebb, ill-smelling border of mangroves, which is never wanting in those places where the land extends into the sea, the waves here reach the foot of the old trees of the forest, many of which were washed underneath. Amongst the most remarkable was a fringe of stately old Barringtoni, covered with orchids and other epiphytes-gorgeous trees when in flower; the red stamens, five inches long, with golden yellow anthers like tassels, depending from the boughs; and their fruit, of the size of the fist, is doubly useful to the fisherman, who employs them, on account of their specific gravity, in floating his nets, and beats them to pieces to stupefy the fish. The foremost trees stood bent towards the sea, and have been so deflected probably for a long time, like many others whose remains still projected out of the water. The destruction of this coast appears to be very considerable. Amongst the climbing palms one peculiar kind was very abundant, the stem of which, as thick as the arm, either dragged itself, leafless, along the ground, or hung in arches above the branches, carrying a crown of leaves only at its extremity; while another, from its habitat the common calamus, had caryota leaves. Wild boars are very plentiful here; a hunter offered us two at one real each.

The direction of the flat coast which extends N.N.W. Colasi. to S.S.E. from the point of Daet is here interrupted by the little peak of Colasi, which projects to the east, and has grown so rapidly that all old people remember
it to have been lower. In the Visita Colasi, on the northern slope of the mountain, the sea is so rough that no boat can live in it. The inhabitants carry on fishing; their fishing-grounds lie, however, on the southern slope of the mountain, in the sheltered bay of Lalauigan, which we reached after thee hours' journey over the ridge.

A four-oared baroto, hired at this place, as the weather was favorable, was to have conveyed us in two hours to Cabusao, the port of Naga; but the wind swung round, and a storm ensued. Thoroughly wet and not without loss, we ran to Barceloneta, a visita situated at a third of the distance. The intelligent Teniente of Colasi, whom we met here, also confirmed the fact of the rapid growth of the little peak.

In opposition to my wish to ascend the mountain, great obstacles were said to exist when every one would be occupied in preparations for the Easter festival, which would hardly occur during the succeeding weeks. As these objections did not convince me, a more substantial reason was discovered the next morning. Inland shoes are excellent for the mud, and particularly for horseback; but for climbing mountains, or rough ground, they would not last a day; and the one remaining pair of strong European shoes, which I reserved for particular purposes, had been given away by my servant, who did not like climbing mountains, on the pretext they were very much too heavy for me.

The shore from Barceloneta to Cabusao is of the same character as the Daet-Colasi but running north and south; the ground, sandy clay, is covered with a thick stratum of broken bivalves. The road was very difficult, as the high tide forced us to climb between the trees and thick underwood. On the way we met an enterprising family who had left Daet with a cargo
of coconuts for Naga, and had been wrecked here; saving only one out of five tinajas of oil, but recovering all the nuts.* They were living in a small hastily-run-up hut, upon coconuts, rice, fish, and mussels, in expectation of a favorable wind to return. There were several varieties of shore-birds; but my gun would not go off, although my servant, in expectation of a hunt, had cleaned it with especial care. As he had lost the ramrod whilst cleaning it, the charge was not withdrawn before we reached Cabusao, when it was discovered that both barrels were full of sand to above the touchhole.

The coast was still more beautiful than on the preceding day, particularly in one place where the surge beat against a wood of fan-palms (Corypha sp.). On the side facing the sea, in groups or rows stood the trees, bereft of their crowns, or lying overthrown like columns amid the vast ruins of temples (one of them was three feet in diameter); and the sight immediately reminded me of Pompeii. I could not account for the bareness of the trunks, until I discovered a hut in the midst of the palms, in which two men were endeavoring to anticipate the waves in their work of destruction by the preparation of sugar (tunguleh). For this purpose, after stripping off the leaves (this palm flowering at the top), the upper end of the stem is cut across, the surface of the incision being inclined about five degrees towards the horizon, and, near its lower edge, hollowed out to a very shallow gutter. The juice exudes over the whole surface of the cut, with the exception of the intersected exterior petioles, and, being collected in the shallow channel, is conducted by a piece of banana-leaf, two inches broad, and four inches long, into a bamboo-cane

[^88]
## Making

 palm-suoa,The money side.

Neglected roads.
attached to the trunk. In order to avert the rain from the saccharine issue, which has a faint, pleasantly aromatic flavor as of barley-sugar, all the trees which have been tapped are provided with caps formed of bent and folded palm-leaves. The average daily produce of each tree is four bamboos, the interior of which is about three inches and a half in diameter. When removed, they are full to about eighteen inches; which gives somewhat more than ten quarts daily.

The produce of each tree of course is very unequal. Always intermittent, it ceases completely after two months-at the utmost, three months; but, the proportion of those newly cut to those cut at an earlier date being the same, the yield of the incisions is about equal. The juice of thirty-three palms, after evaporation in an iron pan immediately upon each collection, produces one ganta, or (there being four such collections) four gantas, daily; the weekly result being twenty gantas, or two tinajas of sugar, each worth two dollars and a half on the spot. This statement, derived from the people themselves, probably shows the proportion somewhat more unfavorable than it really is; still, according to the opinion of an experienced mestizo, the difference cannot be very considerable. Assuming the above figures as correct, however, one of these magnificent trees would give about one dollar and two-thirds, or, after deducting the laborers' wages one real per diem, about a thaler and two-thirds; not a large sum truly; but it is some consolation to know that, even if man did not interfere, these trees would in process of time fall victims to the breakers, and that, even if protected against external ravages, they are doomed to natural extinction after once producing fruit.

Cabusao lies in the southern angle of San Miguel Bay which is, almost on every side, surrounded by high
mountains, and affords good anchorage for ships. From here I repaired across Naga to the south coast. Four leagues from Naga, in the heart of Ragay, on the southern border of Luzon, is the small but deep harbor of Pasacao; and two hours by water conducted us to the intermediate Visita Pamplona, whence the route is pursued by land. The still-existing remnant of the old road was in a miserable condition, and even at that dry season of the year scarcely passable; the bridges over the numerous little ditches were broken down, and in many places, right across the road, lay large stones and branches of trees which had been brought there years before to repair the bridges, and, having been unused, have ever since continued to obstruct the road.

In Quitang, between Pamplona and Pasacao, where two brooks unite themselves into one little river debouching at the latter place, a young Frenchman had established a hacienda. He was contented and hopeful, and loudly praised the industry and friendliness of his people. Probably because they make fewer exactions, foreigners, as a rule, seem to agree better with the natives than Spaniards. Of these exactions, the bitterest complaints are rife of the injustice of the demands made upon the lower classes in the settlement of their wages; which, if they do not immediately find the necessary hands for every employment, do not correspond with the enhanced value of the products; and, according to them, the natives must even be driven from public employments, to labor in their service.*

The Filipino certainly is more independent than the European laborer, because he has fewer wants and, as a

[^89]native landowner, is not compelled to earn his bread as the daily laborer of another; yet, with reference to wages, it may be questioned whether any colony whatever offers more favorable conditions to the planter than the Philippines. In Dutch India, where the prevalence of monopoly almost excludes private industry, free laborers obtain one-third of a guilder-somewhat more than one real, the usual wages in the wealthy provinces of the Philippines (in the poorer it amounts to only the half); and the Javanese are not the equals of the Filipinos, either in strength, or intelligence, or skill; and the rate of wages in all the older Slave States is well known. For the cultivation of sugar and coffee, Mauritius and Ceylon are obliged to import foreign laborers at great expense, and to pay them highly; and yet they are successful.

## Pastariato.

From Quitang to Pasacao the road was far worse than it had heretofore been; and this is the most important road in the province! Before reaching Pasacao, evident signs are visible, on the denuded sides of the limestone, of its having been formerly washed by the sea. Pasacao is picturesquely situated at the end of the valley which is intersected by the Itulan, and extends from Pamplona, between wooded mountains of limestone, as far as the sea. The ebb tides here are extremely irregular. From noon to evening no difference was observable, and, when the decrease just became visible, the tide rose again. Immediately to the south, and facing the district, the side of a mountain, two thousand feet high and above one thousand feet broad, had two years ago given way to the subterranean action of the waves. The rock consists of a tough calcareous breccia, full of fragments of mussels and corals; but, being shoeless, I could not remain on the sharp rock sufficiently long to make a closer examination.

For the same reason, I was obliged to leave the ascent of the Yamtik, which I had before vainly attempted from Libmanan, unaccomplished from this point, although I had the advantage of the company of an obliging French planter in a boat excursion in a northwesterly direction along the coast. Here our boat floated along over gardens of coral, swarming with magnificently colored fishes; and after two hours we reached a cavern in the limestone, Suminabang, so low that one could stir in it only by creeping; which contained a few swallows and bats. On the Calebayan river, on the further side of Point Tanaun, we came upon a solitary shed, our night-quarters. Here the limestone range is interrupted by an isolated cliff on the left bank of the little river, consisting of a crystalline rock chiefly composed of hornblende; which moreover, on the side exposed to the water, is surrounded completely by limestone.

The surrounding mountains must swarm with wild

A beautiful
coast.
boars. Under the thatched roof of our hut, which serves as a shelter to occasional hunters, more than a hundred and fifty lower jaw-bones were set up as hunting trophies. The place appeared as if created for the breeding of cattle. Soft with fodder grass, and covered with a few groups of trees, with slopes intersected by rustling brooks, it rose up out of the sea, and was encompassed by a steep wall of rock in the form of a semicircle; and here cattle would find grass, water, shade, and the protection of an enclosing rampart. While travelling along the coast, we had remarked a succession of similar localities, which however, from lack of enterprise and from the dread of pirates, were not utilized. As soon as our supper was prepared, we carefully extinguished our fire, that it might not serve as a signal to the vagabonds of the sea, and kept night watches.

A delusive cave.

Isolation of fertile regions.

River highways. other from the south-east, and both navigable before they reach the borders of the province, flow through the middle of it in a line parallel with the coast (taking no account of its windings), and, after their junction, send their waters together through the estuary of Ca busao into the Bay of San Miguel. The whole province, therefore, is traversed through its center by two navigable rivers, which, as regards commerce, form only one.

But the harbor of Cabusao, at the bottom of the Bay of San Miguel, is not accessible during the north-east monsoon, and has this further disadvantage, that the
intercourse of the whole of the eastern part of Luzon with Manila can be carried on only by a very circuitous route. On the south coast, on the other hand, is the harbor of Pasacao, into which a navigable little river, above a mile in width, discharges itself; so that the distance between this river highway and the nearest point of the Bicol River amounts to a little more than a mile. The road connecting the two seas, laid out by an active alcalde in 1847, and maintained up to 1852 , was however, at the date of my inquiry, in so bad a condition that a picul of abaca paid two reals freight for this short distance, in the dry season; and in the wet season it could not be forwarded for double the price.*

Many similar instances may be brought forward. In 1861 the English vice-consul reported that in Iloilo a picul of sugar had risen more than $2 r$. in price (as much as the cost of freight from Iloilo to Manila), in consequence of the bad state of the road between the two places, which are only one league asunder.

If, without reference to transport by sea, the islands were not favored in so extraordinary a manner by

Bad roads raise freights.

Social and political reasons for bad roads. innumerable rivers with navigable mouths, a still greater proportion of their produce would not have been convertible into money. The people, as well as the local authorities, have no desire for roads, which they themselves construct by forced labor, and, when completed, must maintain by the same method; for, when no roads are made, the laborers are so much more easily employed in private operations. Even the parish priests, generally, are as little favorable to the planning of commercial intercourse, by means of which trade, prosperity, and enlightenment would be introduced into the country, and their authority undermined. Indeed the Govern-

[^90]ment itself, up to within a short time since, favored such a state of affairs; for bad roads belong to the essence of the old Spanish colonial policy, which was always directed to effect the isolation of the separate provinces of their great transmarine possessions, and to prevent the growth of a sense of national interest, in order to facilitate

Spanish
economic backwardness. their government by the distant mother country.

Besides, in Spain itself matters are no better. The means of communication there are so very deficient that, as an instance, merchandise is sent from Santander to Barcelona, round the whole Iberian peninsula, in preference to the direct route, which is partly accomplished by railway.* In Estremadura the hogs were fed with wheat (live animals can be transported without roads), while at the same time the seaports were importing foreign grain. $\dagger$ The cause of this condition of affairs in that country is to be sought less in a disordered state of finance, than in the enforcement of the Government maxim which enjoins the isolation of separate provinces.

## XVII

Mt. Isarög. The Isaróg (pronounced Issaró) rises up in the middle of Camarines, between San Miguel and Lagonoy bays. While its eastern slope almost reaches the sea, it is separated on its western side by a broad strip of inundated land from San Miguel Bay. In circumference it is at least twelve leagues; and its height 1,966 meters. $\ddagger$ Very flat at its base, it swells gradually to $16^{\circ}$, and higher

[^91]up to $21^{\circ}$ of inclination, and extends itself, in its western aspect, into a flat dome-shaped summit. But, if viewed from the eastern side, it has the appearance of a circular chain of mountains rent asunder by a great ravine. On Coello's map this ravine is erroneously laid down as extending from south to north; its bearing really is west to east. Right in front of its opening, and half a league south from Goa, lies the pretty little village of Rungus, by which it is known. The exterior sides of the mountain and the fragments of its large crater are covered with impenetrable wood. Respecting its volcanic eruptions tradition says nothing.

The higher slopes form the dwelling-place of a small race of people, whose independence and the customs of

Primitice mountaneers. a primitive age have almost entirely separated them from the inhabitants of the plain. One or two Cimarrons might occasionally have been attracted hither, but no such instance is remembered. The inhabitants of the Isaróg are commonly, though mistakenly, called Igorots; and I retain the name, since their tribal relationship has not yet been accurately determined; they themselves maintaining that their ancestors always dwelt in that locality. There are some who, in the opinion of the parish priest of Camarines, speak the Bicol language in the purest manner. Their manners and customs are very similar, in many respects, to what they were on the arrival of the Spaniards; and sometimes they also remind one of those prevailing among the Dyaks of Borneo at the present day.* These circumstances give rise to the conjecture that they may be the last of a race which maintained its independence against the Spanish rule, and probably also against the little

[^92]Similarity to Indian Archipelago conditions.

Policy of non-intercourse with heathens.
tyrants who ruled over the plain before the arrival of the Europeans. When Juan de Salcedo undertook his triumphal march round North Luzon he found everywhere, at the mouths of the rivers, seafaring tribes living under many chieftains who, after a short struggle, were slain by the superior discipline and better arms of the Spaniards, or submitted voluntarily to the superior race; but he did not succeed in subduing the independent tribes in the interior; and these are still to be found in all the larger islands of the Philippine group.
Similar conditions are found in many places in the Indian Archipelago. The Malays, carrying on trade and piracy, possess the shore, and their language prevails there; the natives being either subdued by them, or driven into the forests, the inaccessibility of which ensures to them a miserable but independent existence.*

In order to break down the opposition of the wild races, the Spanish Government forbade its subjects, under the penalty of one hundred blows and two years of forced labor, "to trade or to have any intercourse with the heathens in the mountains who pay no tribute to his Catholic Majesty, for although they would exchange their gold, wax, etc., for other necessaries, they will never change for the better." Probably this law has for centuries directly contributed to save the barbarians, notwithstanding their small numbers, from complete extermination; for free intercourse between a people existing by agriculture, and another living principally by the chase, speedily leads to the destruction of the latter.

[^93]The number of the Igorots of the Isaróg has, however, been much diminished by deadly battles between the different ranchos, and by the marauding expenditions which, until a short time since, were annually undertaken by the commissioners of taxes, in the interest of the Government monopoly, against the tobacco fields of the Igorots. Some few have been "pacified" (converted to Christianity and tribute); in which case they are obliged to establish themselves in little villages of scattered huts, where they can be occasionally visited by the priest of the nearest place; and, in order to render the change easier to them, a smaller tax than usual is temporarily imposed upon such newly-obtained subjects.

I had deferred the ascent of the mountain until the beginning of the dry season of the year; but I learned in Naga that my wish was hardly practicable, because the expeditions against the ranchos of the mountain, which I have already mentioned, usually occurred about this time. As the wild people could not understand why they should not cultivate on their own fields a plant which had become a necessity to them, they saw in the Cuadrilleros, not functionaries of a civilized State, but robbers, against whom they were obliged to defend themselves by force; and appearances contributed no less to confirm them in their error; for these did not content themselves with destroying the plantations of tobacco, but the huts were burnt to the ground, the fruit-trees hewn down, and the fields laid waste. Such forays never occurred without bloodshed, and often developed into a little war which was carried on by the mountaineers for a long time afterwards, even against people who were entirely uninterested in itFilipinos and Europeans. The expedition this year was to take place in the beginning of April; the Igorots consequently were in a state of great agitation, and

Christion
Mountaineers' villages.

Tobacco
nonopoly wars. peace.

A populous fertile district.

A bare plain and wretched village.
had, a few days previously, murdered a young unarmed Spaniard in the vicinity of Mabotoboto, at the foot of the mountain, by bringing him to the ground with a poisoned arrow, and afterwards inflicting twenty-one wounds with the wood-knife (bolo).

Fortunately there arrived soon after a countermand from Manila, where the authorities seemed to have been gradually convinced of the harmful tendency of such violent measures. It could not be doubted that this intelligence would quickly spread amongst the ranchos; and, acting upon the advice of the commandant (upon whom, very much against his inclination, the conduct of the expedition had devolved), I lost no time in availing myself of the anticipated season of quiet. The Government have since adopted the prudent method of purchasing the tobacco, which is voluntarily cultivated by the Igorots, at the ordinary rate, and, where practicable, encouraging them to lay out new fields, instead of destroying those in existence.

The next day at noon I left Naga on horseback. The pueblos of Mogarao, Canaman, Quipayo, and Calabanga, in this fertile district follow so thickly upon one another that they form an almost uninterrupted succession of houses and gardens. Calabanga lies half a league from the sea, between the mouths of two rivers, the more southerly of which is sixty feet broad and sufficiently deep for large trading vessels.*

The road winds round the foot of the Isaróg first to the north-east and then to the east. Soon the blooming hedges cease, and are succeeded by a great bare plain, out of which numerous flat hillocks raise themselves. Both hills and plain, when we passed, served for pasturage; but from August to January they are sown with rice; and fields of batata are occasionally seen. After four hours we arrived at the little village
of Maguiring (Manguirin), the church of which, a tumbledown shed, stood on an equally naked hillock; and from its neglected condition one might have guessed that the priest was a native.

This hillock, as well as the others which I examined, consisted of the débris of the Isaróg, the more or less

Many mountain water courses. decomposed trachytic fragments of hornblende rock, the spaces between which were filled up with red sand. The number of streams sent down by the Isaróg, into San Miguel and Lagonoy bays, is extraordinarily large. On the tract behind Maguiring I counted, in threequarters of an hour, five considerable estuaries, that is to say, above twenty feet broad; and then, as far as Gọa, twenty-six more; altogether, thirty-one: but there are more, as I did not include the smallest; and yet the distance between Maguiring and Goa, in a straight line, does not exceed three miles. This accounts for the enormous quantity of steam with which this mighty condenser is fed. I have not met with this phenomenon on any other mountain in so striking a manner. One very remarkable circumstance is the rapidity with which the brimming rivulets pass in the estuaries, enabling them to carry the trading vessels, sometimes even ships, into a main stream (if the expression may be allowed), while the scanty contributions of their kindred streams on the northern side have scarcely acquired the importance of a mill-brook. These waters, from their breadth, look like little rivers, although in reality they consist of only a brook, up to the foot of the mountain, and of a river's mouth in the plain; the intermediate part being absent.

The country here is strikingly similar to the remarkable mountain district of the Gelungúng, described by

Comparison with Javan Mountain district.

[^94]Junghuhn;* yet the origin of these rising grounds differs in some degree from that of those in Java. The latter were due to the eruption of 1822 , and the great fissure in the wall of the crater of the Gelungúng, which is turned towards them, shows unmistakably whence the materials for their formation were derived; but the great chasm of the Isaróg opens towards the east, and therefore has no relation to the numberless hillocks on the north-west of the mountain. Behind Maguiring they run more closely together, their summits are flatter, and their sides steeper; and they pass gradually into a gently inclined slope, rent into innumerable clefts, in the hollows of which as many brooks are actively employed in converting the angular outlines of the little islands into these rounded hillocks. The third river behind Maguiring is larger than those preceding it; on the sixth lies the large Visita of Borobod; and on the tenth, that of Ragay. The rice fields cease with the hill country, and on the slope, which is well drained by deep channels, only wild cane and a few groups of trees grow. Passing by many villages, whose huts were so isolated and concealed that they might remain unobserved, we arrived at five o'clock at Tagunton; from which a road, practicable for carabao carts, and used for the transport of the abacá grown in the district, leads to Goa; and here, detained by sickness, I hired a little house, in which I lay for nearly four weeks, no other remedies offering themselves to me but hunger and repose.

Useful friends.
During this time I made the acquaintance of some newly-converted Igorots, and won their confidence. Without them I would have had great difficulty in ascending the mountains as well as to visit their tribe in its

[^95]farms without any danger.* When, at last, I was able to quit Goa, my friends conducted me, as the first step, to their settlement; where, having been previously recommended and expected, I easily obtained the requisite number of attendants to take into their charge the animals and plants which were collected for me.

On the following morning the ascent was commenced. Even before we arrived at the first rancho, I was convin-

A heathen Mountaineers' settlement. ced of the good report that had preceded me. The master of the house came towards us and conducted us by a narrow path to his hut, after having removed the foot-lances, which projected obliquely out of the ground, but were dexterously concealed by brushwood and leaves. $\dagger$ A woman employed in weaving, at my desire, continued her occupation. The loom was of the simplest kind. The upper end, the chain-beam, which consists of a piece of bamboo, is fixed to two bars or posts; and the weaver sits on the ground, and to the two notched ends of a small lath, which supplies the place of the weaving beam, hooks on a wooden bow, in the arch of which the back of the lath is fitted. Placing her feet against two pegs in the ground and bending her back, she, by means of the bow, stretches the material out straight. A netting-needle, longer than the breadth of the web, serves instead of the weaver's shuttle, but it can be pushed through only by considerable friction, and not always without breaking the chains of threads. A lath of hard wood (caryota), sharpened like a knife, represents the trestle, and after every stroke it is placed upon the edge; after which the comb is pushed

[^96]A giant fern hedge.

Simple stringed instruments.
forward, a thread put through, and struck fast, and so forth. The web consisted of threads of the abacá, which were not spun, but tied one to another.

The huts I visited deserve no special description. Composed of bamboos and palm-leaves, they are not essentially different from the dwellings of poor Filipinos; and in their neighborhood were small fields planted with batata, maize, caladium and sugar-cane, and enclosed by magnificent polypody ferns. One of the highest of these, which I caused to be felled for the purpose, measured in the stem nine meters, thirty centimeters; in the crown, two meters, twelve centimeters; and its total length was eleven meters, forty-two centimeters or over thirty-six feet.

A young lad produced music on a kind of lute, called baringbau; consisting of the dry shaft of the scitamina stretched in the form of a bow by means of a thin tendril instead of gut. Half a coco shell is fixed in the middle of the bow, which, when playing, is placed against the abdomen, and serves as a sounding board; and the string when struck with a short wand, gave out a pleasing humming sound, realizing the idea of the harp and plectrum in their simplest forms. Others accompanied the musician on Jews' harps of bamboos, as accurate as those of the Mintras on the Malay Peninsula; and there was one who played on a guitar, which he had himself made, but after a European pattern. The hut contained no utensils besides bows, arrows, and a cooking pot. The possessor of clothes bore them on his person. I found the women as decently clad as the Filipino Christian women, and carrying, besides, a forest knife, or bolo. As a mark of entire confidence, I was taken into the tobacco fields, which were well concealed and protected by foot-lances; and they appeared to be carefully looked after.

The result of my familiarity with this people, both before and after this opportunity, may be briefly summed up: They live on the higher slopes of the mountain, never, indeed, below 1,500 feet; each family by itself. It is difficult to ascertain how many of them there may now be, as but little intercourse takes place amongst them. In the part of the mountain belonging to the district of Goa, their number is estimated at about fifty men and twenty women, including the children: but twenty years before the population was more numerous. Their food consists principally of batata, besides some gabi (caladium). A little maize is likewise cultivated, as well as some ubi (dioscorea), and a small quantity of sugar-cane for chewing.
In laying out a batata field, a wood is partially cleared, the earth loosened with the blunt forest knife (bolo), and the bulbs or layers then planted; and within four months the harvest begins, and continues uninterruptedly from the time the creeping plant strikes root and forms tubers. After two years, however, the produce is so much diminished that the old plants are pulled up, in order to make room for new ones obtained from the runners. The field is then changed, or other fruits cultivated thereon, but with the addition of manure. A piece of land, fifty brazas long, and thirty wide, is sufficient for the support of a family. Only occasionally in the wet season does this resource fail, and then they resort to gabi, which appears to be as easily cultivated on wet as on dry ground, but is not so profitable as batata. The young shoots of the gabi are planted at distances of a vara, and if consumed in a proper manner, ought not to be cropped till after a year. Each family kills weekly one or two wild hogs. Stags are rare, although I obtained a fine pair of horns; and they do not use the skin. Bows and arrows are used in hunting; some poisoned,
and some not. Every rancho keeps dogs, which live principally on batata, and also cats to protect the fields against rats; and they also have poultry, but no game cocks; which, having been first introduced into the Phil-

Game cocks a Spanish innovation.

Trade.

Religion.

Respect for women and aged. ippines by the Spaniards, are seldom, if ever, wanting in the huts of the Filipinos; but the inhabitants of the Isaróg are as yet free from this passion.

The few products of a more advanced civilization which they require, they obtain by the sale of the spontaneous productions of their forests, chiefly wax and resin (pili),* apnik, dagiangan (a kind of copal), and some abacá. Wax, which is much in request for church solemnities, fetches half a dollar per catty; and resin averages half a real per chinanta. Business is transacted very simply. Filipinos, having intercourse with the Igorots, make a contract with them; and they collect the products and bring them to a place previously agreed on, where the Filipinos receive them, after paying down the stipulated price.

Physicians and magicians, or persons supposed to be possessed of secret powers, are unknown; every one helps himself. In order to arrive at a clear understanding of their religious views, a longer intercourse would be necessary. But they certainly believe in one God, or, at least, say so, when they are closely questioned by Christians; and have also loosely acquired several of the external practices of Catholicism, which they employ as spells.

Hunting and hard labor constitute the employment of man in general, as well as in the Philippines. The practice of employing women as beasts of burdenwhich, although it exists among many of the peoples of Europe, for example, the Basques, Wallachians, and

[^97]Portuguese, is almost peculiar to barbarous nations, seems to have been lost in the Philippines as far back as the time of its discovery by the Spaniards; and even among the wild people of the Isaróg, the women engage only in light labor, and are well treated. Every family supports its aged and those unfit for labor. Headaches and fevers were stated to me as the prevalent maladies; for which burnt rice, pounded and mixed to a pap with water, is taken as a remedy; and in case of severe headache they make an incision in the forehead of the sufferer. Their prevalence is explained by the habit of neutralizing the ill effects of drinking water in excess, when they are heated, by the consumption of warm water in large doses; and the rule holds with regard to coco-water; the remedy for immoderate use of which is warm cocowater. Their muscular power is small, and they are not able to carry more than fifty pounds weight to any considerable distance.

Besides the chase and agriculture, their occupations are restricted to the manufacture of extremely rude weapons, for which they purchase the iron, when required, from the Filipinos, and of the coarse webs made by the women, and of wicker work. Every father of a family is master in his own house, and acknowledges no power higher than himself. In the event of war with neighboring tribes, the bravest places himself at the head, and the rest follow him as long as they are able; there is no deliberate choosing of a leader.

On the whole, they are peaceful and honorable towards Death customs. each other, although the idle occasionally steal the fruits of the fields; and, should the thief be caught, the person robbed punishes him with blows of the rattan, without being under any apprehensions of vengeance in consequence. If a man dies, his nearest kinsmen go out to requite his death by the death of some other individual,
taken at random. The rule is strictly enforced. For a dead man a man must be killed; for a woman a woman; and for a child a child. Unless, indeed, it be a friend they encounter, the first victim that offers is killed. Latterly, however, owing to the unusual success attained by some of them in representing the occurrence of death as an unavoidable destiny, the custom is said to have fallen into desuetude; and the relatives do not exact the satisfaction. This was easy in the case of the deceased being an ordinary person; but, to the present day, vengeance is required in the event of the death of a beloved child or wife. If a man kills a woman of another house, her nearest kinsman endeavors to kill a woman of the house of the murderer; but to the murderer himself he does nothing; and the corpse of the victim thus slain as a death-offering is not buried, nor is its head cut off; and her family, in their turn, seek to avenge the death by murder. This is reckoned the most honorable course. Should the murderer, however, be too strong to be so overcome, any weaker person, be it who it may, is slain in retaliation; and hence, probably, the comparatively small number of women.

Marriage.
Polygamy is permitted; but even the most courageous and skilful seldom or never have more than one wife. A young man wishing to marry commissions his father to treat with the father of the bride as to the price; which latterly has greatly increased; but the average is ten bolos, costing from four to six reals each, and about $\$ 12$ in cash; and the acquisition of so large a sum by the sale of wax, resin, and abacá, often takes the bridegroom two years. The bride-money goes partly to the father, and partly to the nearest relations; every one of whom has an equal interest. If there should
be many of them, almost nothing remains for the father, who has to give a great feast, on which occasion much palm-wine is drunk.

Any man using violence towards a girl is killed by her parents. If the girl was willing, and the father hears of it, he agrees upon a day with the former, on which he is to bring the bride's dowry; which should he refuse to do, he is caught by the relations, bound to a tree, and whipped with a cane. Adultery is of most rare occurrence; but, when it does take place, the dowry is returned either by the woman, who then acquires her freedom, or by the seducer, whom she then follows. The husband has not the right to detain her, if he takes the money, or even if he should refuse it; but the latter contingency is not likely to arise, since that sum of money will enable him to buy for himself a new wife.

In the afternoon we reached a vast ravine, called Basira rarne. "Basira," 973 meters above Uacloy, and about 1,134 meters above the sea, extending from south-east to northwest between lofty, precipitous ranges, covered with wood. Its base, which has an inclination of $33^{\circ}$, consists of a naked bed of rock, and, after every violent rainfall, gives issue to a torrent of water, which discharges itself violently. Here we bivouacked; and the Igorots, in a very short time, built a hut, and remained on the watch outside. At daybreak the thermometer stood at $13.9^{\circ}$ R.*

The road to the summit was very difficult on account at the summit. of the slippery clay earth and the tough network of plants; but the last five hundred feet were unexpectedly easy, the very steep summit being covered with a very thick growth of thinly leaved, knotted, mossy thibaudia, rhododendra, and other dwarf woods, whose innumerable

[^98]tough branches, running at a very small height along the ground and parallel to it, form a compact and secure lattice-work, by which one mounted upwards as on a slightly inclined ladder. The point which we reached * * * was evidently the highest spur of the horse-shoe-shaped mountain side, which bounds the great ravine of Rungus on the north. The top was hardly fifty paces in diameter, and so thickly covered with trees that I have never seen its like; we had not room to stand. My active hosts, however, went at once to work, though the task of cutting a path through the wood involved severe labor, and, chopping off the branches, built therewith, on the tops of the lopped trees, an observatory, from which I should have had a wide panoramic view, and an opportunity for taking celestial altitudes, had not everything been enveloped in a thick mist. The neighboring volcanoes were visible only in glimpses, as well as San Miguel Bay and some lakes in the interior. Immediately after sunset the thermometer registered $12.5^{\circ}$ R.*

The descent.

Ferns and onchids.

On the following morning it was still overcast; and when, about ten o'clock, the clouds became thicker, we set out on our return. It was my intention to have passed the night in a rancho, in order next day to visit a solfatara which was said to be a day's journey further; but my companions were so exhausted by fatigue that they asked for at least a few hours' rest.
On the upper slope I observed no palms, with the exception of calamus; but polypodies (ferns) were very frequent, and orchids surprisingly abundant. In one place all the trees were hung, at a convenient height, with flowering aërids; of which one could have collected

[^99]thousands without any trouble. The most beautiful plant was a Medinella, of so delicate a texture that it was impossible to preserve it.
Within a quarter of an hour north-east of Uacloy, a considerable spring of carbonic acid bursts from the ground, depositing abundance of calcareous sinter. Our torches were quickly extinguished, and a fowl covered with a cigar-box died in a few minutes, to the supreme astonishment of the Igorots, to whom these phenomena were entirely new.

On the second day of rest, my poor hosts, who had accompanied me back to Uacloy, still felt so weary that

Carbonic
acid spring.

F'arewell to mountaineers. they were not fit for any undertaking. With naked heads and bellies they squatted in the burning sun in order to replenish their bodies with the heat which they had lost during the bivouac on the summit; for they are not allowed to drink wine. When I finally left them on the following day, we had become such good friends that I was compelled to accept a tamed wild pig as a present. A troop of men and women accompanied me until they saw the glittering roofs of Maguiring, when, after the exchange of hearty farewells, they returned to their forests. The natives whom I had taken with me from Goa had proved so lazy and morose that nearly the whole task of making the path through the forest had fallen upon the Igorots. From sheer laziness they threw away the drinking water of which they were the porters; and the Igorots were obliged to fetch water from a considerable distance for our bivouac on the summit. In all my troublesome marches, I have always done better with Cimarrons than with the civilized natives. The former I have found obliging, trustworthy, active and acquainted with localities, while the latter generally displayed the opposite qualities. It would, however, be unjust to form a conclusive opinion as to their com-
parative merits from these facts; for the wild people are at home when in the forest; what they do is done voluntarily, and the stranger, when he possesses their confi-

Forced labor.

A petition for liquors. dence, is treated as a guest. But the Filipinos are reluctant companions, Polistas, who, even when they receive a high rate of wages, consider that they are acting most honorably when they do as little as possible. Atany rate, it is no pleasure to them to leave their village in order to become luggage-porters or beaters of roads on fatiguing marches in impracticable districts, and to camp out in the open air under every deprivation. For them, still more than for the European peasant, repose is the most agreeable refreshment. The less comfort any one enjoys at home, the greater is the reluctance with which he leaves it; and the same thing may be observed in Europe.

As the Igorots were not permitted to have cocoapalms for the preparation of wine, vinegar and brandy, so that they might not infringe the monopoly of the government, they presented me with a petition entreating me to obtain this favor for them. The document was put together by a Filipino writer in so ludicrously confused a manner that I give it as a specimen of Philippine clerkship.* At all events, it had the best of results, for the petitioners were accorded twice as much as they had prayed for.

[^100]The south-west monsoon lasts in this region (district of Goa) from April to October. April is very calm (navegación de señoras). From June to August the south-west winds blow steadily; March, April, and May are the driest months; there are shifting winds in March and the beginning of April; while from October to December is the time of storms; "S. Francisco (4th October) brings bad weather." Rice is planted in September and reaped in February.

## XVIII

From the Isarog I returned through Naga and Nabua to Iriga, the ascent of which I at length accomplished.

The chief of the Montesinos had received daily rations for twenty-two men, with whom he professed to make a road to the summit; but when, on the evening of the third day, he came himself to Iriga, in order to fetch more provisions, on the pretext that the work still required some time for execution, I explained that I should endeavor to ascend the mountain on the following morning, and requested him to act as guide. He consented, but disappeared, together with his companions, during the night; the Filipinos in the tribunal having been good enough to hold out the prospect of severe punishment in case the work performed should not correspond to the working days. After fruitless search for another guide, we left Buhi in the afternoon, and passed the night in the rancho, where we had previously been so hospitably received. The fires were still burning, but the inhabitants, on our approach, had fled. About six o'clock on the following morning the ascent began. After we had gone through the forest, by availing ourselves of the path which we had previously
beaten, it led us through grass three or four feet in height, with keen-edged leaves; succeeded by cane, from seven to eight feet high, of the same habitat with our Arundo phragmites (but it was not in flower), which occupied the whole of the upper part of the mountain as far as the edge. Only in the ravine did the trees attain any height. The lower declivities were covered with aroids and ferns; towards the summit were tendrils and mosses; and here I found a beautiful, new, and peculiarly shaped orchid.* The Cimarrons had cut down some cane; and, beating down our road for ourselves with bolos, we arrived at the summit a little before ten o'clock. It was very foggy. In the hope of a clear evening or morning I caused a hut to be erected, for which purpose the cane was well fitted. The natives were too lazy to erect a lodging for themselves, or to procure wood for a watchfire. They squatted on the ground, squeezed close to one another to warm themselves, ate cold rice, and suffered thirst because none of them would fetch water. Of the two water-carriers whom I had taken with me, one had "inadvertently" upset his water on the road, and the other had thrown it away "because he thought we should not require it."

Altitude.

Changes in Batu Lake.

I found the highest points of the Iriga to be 1,212 meters, 1,120 meters above the surface of the Buhi Lake. From Buhi I went to Batu.

The Batu Lake (one hundred eleven meters above the sea) had sunk lower since my last visit in February. The carpet of algae had increased considerably in breadth, its upper edge being in many places decomposed; and the lower passed gradually into a thick consistency of putrid water-plants (charae, algae, pontederiae, valisneriae, pistiae, etc.), which encompassed the surface of the water so that only through a few gaps could one reach the bank.

[^101]Right across the mouth of the Quinali lies, in the lake. a bar of black mud, the softest parts of which were indicated by some insignificant channels of water. As we could not get over the bar in a large boat, two small skiffs were bound together with a matting of bamboo, and provided with an awning. By means of this contrivance, which was drawn by three strong carabaos (the whole body of men with evident delight and loud mirth wading knee-deep in the black mud and assisting by pushing behind) we succeeded, as if on a sledge, in getting over the obstacle into the river; which on my first visit overflowed the fields in many places, till the huts of the natives rose out of the water like so many ships: but now (in June) not one of its channels was full. We were obliged in consequence to continue our sledge journey until we were near to Quinali.

At Ligao I alighted at a friendly Spaniard's, a great part of the place, together with the tribunal and convent, having been burnt down since my last visit. After making the necessary preparations, I went in the evening to Barayong, a little rancho of Cimarrons at the foot of the Mazaraga, and, together with its inhabitants, ascended the mountain on the following morning. The women also accompanied us for some distance, and kept the company in good humor; and when, on the road, a Filipino who had been engaged for the purpose wished to give up carrying a bamboo full of water, and, throwing it away, ran off, an old woman stepped forward in his stead, and dragged the water cheerfully along up to the summit. This mountain was moister than any I had ever ascended, the Semeru in Java, in some respects, excepted; and half-way up I found some rotten rafflesia.* Two miserable-looking Cimarron dogs drove a young stag towards us, which was slain by one of the people

[^102]with a blow of his bolo. The path "ceased a third of the way up, but it was not difficult to get through the wood. The upper portion of the mountain, however, being thickly overgrown with cane, again presented great obstacles. About twelve ẁe reached the summitlevel, which, pierced by no crater, is almost horizontal,

Altitude.

Butterflies. smoothly arched, and thickly covered with cane. Its height is 1,354 meters. In a short time the indefatigable Cimarrons had built a fine, large hut of cane: one room for myself and the baggáge, a large assembly-room for the people, and a special apartment for cooking. Unfortunately the cane was so wet that it would not burn. In order to procure firewood to cook the rice, thick branches were got out of the wood, and their comparatively dry pith extracted with great labor. The lucifer-matches, too, were so damp that the phosphorus was rubbed away in friction; but, being collected on blotting-paper, and kneaded together with the sulphurous end of the match-wood, it became dry and was kindled by friction. Not a trace of solid rock was to be seen. All was obstructed by a thick overgrowth from where the path ceased, and the ground covered with a dense bed of damp wood-earth. The following morning was fine, and showed a wide panorama; but, before I had completed my drawing, it again became misty; and as, after several hours of waiting, the heavens were overspread with thick rain-clouds, we set out on our return.

Numerous butterflies swarmed around the summit. We could, however, catch only a few, as the passage over the cane-stubble was too difficult for naked feet; and, the badly-stitched soles of two pairs of new shoes which I had brought from Manila having dropped off some time before I reached the summit, I was compelled to perform the journey to Ligao barefoot.

On the following day my Spanish host went twice to the tribunal to procure the carabao carts which were necessary for the furtherance of my collections. His courteous request was unsuccessful; but the command of the parish priest, who personally informed the Gobernadorcillo in his house, was immediately obeyed. The Filipino authorities have, as a rule, but little respect for private Spanish people, and treat them not seldom with open contempt. An official recommendation from the alcalde is usually effectual, but not in all the provinces; for many alcaldes do hurt to their own authority by engaging the assistance or connivance of the native magistrates in the furtherance of their personal interests.

I here shot some panikes, great bats with wings nearly

## Native contempt

 for private Spaniards. five feet wide when extended, which in the day time hang asleep from the branches of trees, and, among them, two mothers with their young sucking ones uninjured. It was affecting to see how the little animals clung more and more firmly to the bodies of their dying parents, and how tenderly they embraced them even after these were dead. The apparent feeling, however, was only self-interest at bottom, for, when their store of milk was exhausted, the old ones were treated without respect, like empty bottles. As soon as the young ones were separated, they fed on bananas, and lived several days, until I at length placed them in spirits.Early in the morning I rode on the priest's horse to Legaspi, and in the evening through deep mud to the alcalde at Albay. We were now (June) in the middle of the so-called dry season, but it rained almost every day; and the road between Albay and Legaspi was worse than ever. During my visit information arrived from the commandant of the faluas on the south coast that, as he was pursuing two pirate vessels, six others suddenly made their appearance, in order to cut off his return;
for which reason he had quickly made his way back. The faluas are very strongly manned, and provided with cannon, but the crews furnished by the localities on the coast are entirely unpractised in the use of fire-arms, and moreover hold the Moros in such dread that, if the smallest chance offers of flight, they avail themselves of it to ensure their safety by making for the land. The places on the coast, destitute of other arms than wooden pikes, were completely exposed to the pirates, who had firmly established themselves in Catanduanes, Biri, and several small islands, and seized ships with impunity, or robbed men on the land. Almost daily fresh robberies and murders were announced from the villages on the shore. During a plundering expedition the men caught are employed at the oars and at its close sold as slaves; and, on the division of the spoil, one of the crew falls to the share of the dato (Moro chief) who fitted out the vessel.* The coasting vessels in these waters, it is true, are mostly provided with artillery, but it is generally placed in the hold of the ship, as no one on board knows how to use it. If the cannon be upon deck, either the powder or the shot is wanting; and the captain promises to be better prepared next time. $\dagger$ The alcalde reported the outrages of the pirates by every post to Manila, as well as the great

No protection from Government. injury done to trade, and spoke of the duty of the Government to protect its subjects, especially as the latter were not permitted to use fire-arms; $\ddagger$ and from the

[^103]Bisayan Islands came the same cry for help. The Government, however, was powerless against the evil. If the complaints were indeed very urgent, they would send a steamer into the waters most infested; but it hardly ever came in sight of pirates, although the latter were carrying on their depredations close in front and behind.

At Samars, the principal town, I subsequently met with a Government steamer, which for fourteen days past had been nominally engaged in cruising against the pirates; but the latter, generally forewarned by their spies, perceive the smoke of the steamers sufficiently soon to slip away in their flat boats; and the officers knew beforehand that their cruise would have no other result than to show the distressed provinces that their outcry was not altogether unnoticed.*

Twenty small steam gunboats of light draught had shortly before been ordered from England, and were nearly ready. The first two indeed arrived soon after in

Government steamer easily eluded.

Steam gunboats more successful. Manila (they had to be transported in pieces round the Cape), and were to be followed by the rest; and they were at one time almost successful in delivering the archipelago from these burdensome pests; $\dagger$ at least, from the proscribed Moros who came every year from the Sulu Sea, mostly from the island of Tawitawi, arriving in May at the Bisayas, and continuing their depredations in the archipelago until the change of the monsoon

[^104]in October or November compelled them to return.*

Renegades join pirates and bandits.

Plants from Berlin. In the Philippines they gained new recruits among vagabonds; deserters, runaway criminals, and ruined spendthrifts; and from the same sources were made up the bands of highway robbers (tulisanes), which sometimes started up, and perpetuated acts of extraordinary daring. Not long before my arrival they had made an inroad into a suburb of Manila, and engaged with the military in the highways. Some of the latter are regularly employed in the service against the tulisanes. The robbers are not, as a rule, cruel to their victims when no opposition is offered. $\dagger$

In Legaspi I found awaiting me several chests with tin lining, which had been sixteen months on their passage by overland route, instead of seven weeks, having been conveyed from Berlin by way of Trieste, on account of the Italian war. Their contents, which had been intended for use in the Philippines exclusively, were now for the most part useless. In one chest there were two small flasks with glass stoppers, one filled with moist charcoal, and the other with moist clay, both

[^105]containing seeds of the Victoria Regia and tubers of red and blue nymphae (water-lily). Those in the first flask were spoiled, as might have been expected; but in that filled with moist clay two tubers had thrown out shoots of half an inch in length, and appeared quite sound. I planted them at once, and in a few days vigorous leaves were developed. One of these beautiful plants, which had been originally intended for the Buitenzorg Garden in Java, remained in Legaspi; the other I sent to Manila, where, on my return, I saw it in full bloom. In the charcoal two Victoria seeds had thrown out roots above an inch in length, which had rotted off. Most likely they had been torn up by the custom-house inspectors, and had afterwards rotted, for the neck of the bottle was broken, and the charcoal appeared as if it had been stirred. I communicated the brilliant result of his mode of packing to the Inspector of the Botanical Gardens at Berlin, who made a second consignment direct to Java, which arrived in the best condition; so that not only the Victoria, but also the one which had been derived in Berlin from an African father and an Asiatic mother, now adorn the water-basins of Java with red pond-roses (the latter plants probably those of the Philippines also).

Being compelled by the continuous rain to dry my collections in two ovens before packing them, I found

Carpentering diffculties. that my servant had burned the greater part, so that the remains found a place in a roomy chest which I purchased for a dollar at an auction. This unfortunately lacked a lid; to procure which I was obliged, in the first place, to liberate a carpenter who had been imprisoned for a small debt; secondly, to advance money for the purchase of a board and the redemption of his tools out of pawn; and even then the work, when it was begun, was several times broken off because previous claims of violent creditors had to be discharged by labor. In
five days the lid was completed, at the cost of three dollars. It did not last long, however, for in Manila I had to get it replaced by a new one.

Off to Samar.

Losing a clever assistant.

At Legaspi I availed myself of an opportunity to reach the island of Samar in a small schooner. It is situated south-east from Luzon, on the farther side of the Strait of San Bernardino, which is three leagues in breadth. At the moment of my departure, to my great regret, my servant left me, "that he might rest a little from his fatigue," for Pepe was good-natured, very skilful, and always even-tempered. He had learned much from the numerous Spanish soldiers and sailors resident in Cavite, his native place, where he used to be playfully called the "Spaniard of Cavite." Roving from one place to another was his delight; and he quickly acquired acquaintances. He knew especially how to gain the favor of the ladies, for he possessed many social accomplishments, being equally able to play the guitar and to milk the carabao-cows. When we came to a pueblo, where a mestiza, or even a "daughter of the country" (creole), dwelt, he would, when practicable, ask permission to milk a cow; and after bringing the señora some of the milk, under pretext of being the interpreter of my wishes, he would maintain such a flow of ingeniously courteous conversation, praising the beauty and grace of the lady, and most modestly allowing his prodigious travelling adventures to be extracted from him, that both knight and esquire beamed with brilliant radiance. A present was always welcome, and brought us many a little basket of oranges; and carabao milk is excellent with chocolate: but it seemed as if one seldom has the opportunity of milking a cow. Unfortunately Pepe did not like climbing mountains, and when he was to have gone with me he either got the stomach-ache or gave away my strong shoes, or allowed them to be stolen;
the native ones, however, being allowed to remain untouched, for he knew well that they were fit only for riding, and derived comfort from the fact. In company with me he worked quickly and cheerfully; but, when alone, it became tedious to him. Particularly he found friends, who hindered him, and then he would abandon his skinning of the birds, which therefore became putrid and had to be thrown away. Packing was still more disagreeable to him, and consequently he did it as quickly as possible, though not always with sufficient care, as on one occasion he tied up, in one and the same bundle, shoes, arsenic-soap, drawings, and chocolate. Notwithstanding trifling faults of this kind, he was very useful and agreeable to me; but he did not go willingly to such an uncivilized island as Samar; and when he received his wages in full for eight months all in a lump, and so became a small capitalist, he could not resist the temptation to rest a little from his labors.

## XIX

The island of Samar, which is of nearly rhomboidal outline, and with few indentations on its coasts, stretches from the north-west to the south-east from $12^{\circ} 37^{\prime}$ to $10^{\circ} 54^{\prime} \mathrm{N}$. ; its mean length being twenty-two miles, its breadth eleven, and its area two hundred and twenty square miles. It is separated on the south by the small strait of San Juanico from the island of Leyte, with which it was formerly united into one province. At the present time each island has its separate governor.

By the older authors the island is called Tendaya, Former names. Ibabao, and also Achan and Filipina. In later times the eastern side was called Ibabao, and the western

Samar, which is now the official denomination for the whole island, the eastern shore being distinguished as the Contracosta.*

Seasons and weather.

As on the eastern coasts of Luzon, the north-east monsoon here exceeds that from the south-west in duration and force, the violence of the latter being arrested by the islands lying to the southwest, while the northeast winds break against the coasts of these easterly islands with their whole force, and the additional weight of the body of water which they bring with them from the open ocean. In October winds fluctuating between north-west and north-east occur; but the prevalent ones are northerly. In the middle of November the northeast is constant; and it blows, with but little intermission, from the north until April. This is likewise the rainy season, December and January being the wettest, when it sometimes rains for fourteen days without interruption. In Lauang, on the north coast, the rainy season lasts from October to the end of December. From January to April it is dry; May, June, and July are rainy; and August and September, again, are dry; so that here there are two wet and two dry seasons in the year. From October to January violent storms (baguios or typhoons) sometimes occur. Beginning generally with a north wind, they pass to the north-west, accompanied by a little rain, then back to the north, and with increasing violence to the north-east and east, where they acquire their greatest power, and then moderate

[^106]to the south. Sometimes, however, they change rapidly from the east to the south, in which quarter they first acquire their greatest force.

From the end of March to the middle of June inconstant easterly winds (N.E.E. and S. E.) prevail, with a

Winds and storms. very heavy sea on the east coast. May is usually calm; but in May and June there are frequent thunderstorms, introducing the south-west monsoon, which though it extends through the months of July, August, and September, is not so constant as the north-east. The lastnamed three months constitute the dry season, which, however, is often interrupted by thunderstorms. Not a week, indeed, passes without rain; and in many years a storm arises every afternoon. At this season of the year ships can reach the east coast; but during the northeast monsoon navigation there is impossible. These general circumstances are subject to many local deviations, particularly on the south and west coasts, where the uniformity of the air currents is disturbed by the mountainous islands lying in front of them. According to the Estado geografico of 1855, an extraordinarily high tide, called dolo, occurs every year at the change of the monsoon in September or October. It rises sometimes sixty or seventy feet, and dashes itself with fearful violence against the south and east coasts, doing great damage, but not lasting for any length of time. The climate of Samar and Leyte appears to be very healthy on the coasts; in fact, to be the best of all the islands of the archipelago. Dysentery, diarrhoea, and fever occur less frequently than in Luzon, and Europeans also are less subject to their attacks than in that place.

The civilized natives live almost solely on its coasts, and there are also Bisayans who differ in speech and

Only the coast settled. manners from the Bicols in about the same degree that the latter do from the Tagalogs. Roads and villages
are almost entirely wanting in the interior, which is covered with a thick wood, and affords sustenance to independent tribes, who carry on a little tillage (vegetable roots and mountain rice), and collect the products of the woods, particularly resin, honey, and wax, in which the island is very rich.

A tedious but eventful voyage.

On the 3rd of July we lost sight of Legaspi, and, detained by frequent calms, crawled as far as Point Montufar, on the northern edge of Albay, then onwards to the small island of Viri, and did not reach Lauang before evening of the 5 th. The mountain range of Bacon (the Pocdol of Coello), which on my previous journeys had been concealed by night or mist, now revealed itself to us in passing as a conical mountain; and beside it towered a very precipitous, deeply-cleft mountain-side, apparently the remnant of a circular range. After the pilot, an old Filipino and native of the country, who had made the journey frequently before, had conducted us, to begin with, to a wrong port, he ran the vessel fast on to the bar, although there was sufficient water to sail into the harbor conveniently.

The district of Lauang (Lahuan), which is encumbered with more than four thousand five hundred inhabitants, is situated at an altitude of forty feet, on the southwest shore of the small island of the same name, which is separated from Samar by an arm of the Catubig. According to a widely-spread tradition, the settlement was originally in Samar itself, in the middle of the rice-fields, which continue to the present day in that place, until the repeated inroads of sea-pirates drove the inhabitants, in spite of the inconvenience attending it, to protect themselves by settling on the south coast of the little island, which rises steeply out of the sea.* The latter

[^107]consists of almost horizontal banks of tufa, from eight to twelve inches in thickness. The strata being continually eaten away by the waves at low watermark, the upper layers break off; and thus the uppermost parts of the strata, which are of a tolerably uniform thickness, are cleft by vertical fissures, and look like the walls of a fortress. Pressed for space, the church and the convent have taken up every level bit of the rock at various heights; and the effect of this accommodation of architecture to the requirements of the ground, though not designed by the architect, is most picturesque.

The place is beautifully situated; but the houses are

Deterioration in the town. not so frequently as formerly surrounded by little gardens while there is a great want of water, and foul odors prevail. Two or three scanty springs afford a muddy, brackish water, almost at the level of the sea, with which the indolent people are content so that they have just enough. Wealthy people have their water brought from Samar, and the poorer classes are sometimes compelled, by the drying-up of the springs, to have recourse to the same place. The spring-water is not plentiful for bathing purposes; and, sea-bathing not being in favor, the people consequently are very dirty. Their clothing is the same as in Luzon; but the women wear no tapis, only a camisa (a short chemise, hardly covering the breast), and a saya, mostly of coarse, stiff guinara, which forms ugly folds, and when not colored black is very transparent. But dirt and a filthy existence form a better screen than opaque garments. The inhabitants of Lauang rightly, indeed, enjoy the reputation of being very idle. Their industry is limited to a little tillage, even fishing being so neglected that frequently there is a scarcity of fish. In the absence of roads by land, there

The Palapat revolt.

Pirate outrages.
is hardly any communication by water; and trade is mostly carried on by mariners from Catbalogan, who exchange the surplus of the harvests for other produce.

From the convent a view is had of part of the island of Samar, the mountain forms of which appear to be a continuation of the horizontal strata. In the centre of the district, at the distance of some miles, a table mountain, famous in the history of the country, towers aloft. The natives of the neighboring village of Palapat retreated to it after having killed their priest, a too covetous Jesuit father, and for years carried on a guerilla warfare with the Spaniards until they were finally overpowered by treachery.

The interior of the country is difficult to traverse from the absence of roads, and the coasts are much infested by pirates. Quite recently several pontins and four schooners, laden with abacá, were captured, and the crews cruelly murdered, their bodies having been cut to pieces. This, however, was opposed to their general practice, for the captives are usually employed at the oars during the continuance of the foray, and afterwards sold as slaves in the islands of the Sulu sea. It was well that we did not encounter the pirates, for, although we carried four small cannons on board, nobody understood how to use them.*

Electing officers.

The governor, who was expected to conduct the election of the district officials in person, but was prevented by illness, sent a deputy. As the annual elections are conducted in the same manner over the whole country, that at which I was present may be taken as typical of the rest. It took place in the common hall; the gov-

[^108]ernor (or his deputy) sitting at the table, with the pastor on his right hand, and the clerk on his left-the latter also acting as interpreter; while Cabezas de Barangay, the gobernadorcillo, and those who had previously filled the office, took their places all together on benches. First of all, six cabezas and as many gobernadorcillos are chosen by lot as electors; the actual gobernadorcillo is the thirteenth, and the rest quit the hall. After the reading of the statutes by the president, who exhorts the electors to the conscientious performance of their duty, the latter advance singly to the table, and write three names on a piece of paper. Unless a valid protest be made either by the parish priest or by the electors, the one who has the most votes is forthwith named gobernadorcillo for the coming year, subject to the approval of the superior jurisdiction at Manila; which, however, always consents, for the influence of the priest would provide against a disagreeable election. The election of the other functionaries takes place in the same manner, after the new gobernadorcillo has been first summoned into the hall, in order that, if he have any important objections to the officers then about to be elected, he may be able to make them. The whole affair was conducted very quietly and with dignity.*

On the following morning, accompanied by the obliging priest, who was followed by nearly all the boys of the village, I crossed over in a large boat to Samar. Out of eleven strong baggage porters whom the governor's representative had selected for me, four took possession of some trifling articles and sped away with them, three

[^109]
## Unsatisfactory forced labor.

others hid themselves in the bush, and four had previously decamped at Lauang. The baggage was divided and distributed amongst the four porters who were detained, and the little, boys who had accompanied us for their own pleasure. We followed the sea-shore in a westerly direction, and at a very late hour reached the nearest visita (a suburban chapel and settlement) where the priest was successful, after much difficulty, in supplying the places of the missing porters. On the west side of the mouth of the Pambujan a neck of land projects

A pirate base.

Catbalogan monopoly of interisland trafic. into the sea, which is a favorite resort of the sea-pirates, who from their shelter in the wood command the shore which extends in a wide curve on both sides, and forms the only communication between Lauang and Catarman. Many travellers had already been robbed in this place; and the father, who was now accompanying me thus far, had, with the greatest difficulty, escaped the same danger only a few weeks before.

The last part of our day's journey was performed very cautiously. A messenger who had been sent on had placed boats at all the mouths of rivers, and, as hardly any other Europeans besides ecclesiastics are known in this district, I was taken in the darkness for a Capuchin in travelling attire; the men lighting me with torches during the passage, and the women pressing forward to kiss my hand. I passed the night on the road, and on the following day reached Catarman (Caladman on Coello's map), a clean, spacious locality numbering 6,358 souls, at the mouth of the river of the same name. Six pontins from Catbalogan awaited their cargoes of rice for Albay. The inhabitants of the north coast are too indifferent sailors to export their products themselves, and leave it to the people of Catbalogan, who, having no rice-fields, are obliged to find employment for their activity in other places.

The river Catarman formerly emptied further to the east, and was much choked with mud. In the year 1851, after a continuous heavy rain, it worked for itself, in the loose soil which consists of quartz sand and fragments of mussels, a new and shorter passage to the seathe present harbor, in which ships of twa hundred tons can load close to the land; but in doing so it destroyed the greater part of the village, as well as the stone church and the priest's residence. In the new convent there are two salons, one 16.2 by 8.8 , the other 9 by 7.6 paces in dimensions, boarded with planks from a single branch of a dipterocarpus (guiso). The pace is equivalent to 30 inches; and, assuming the thickness of the boards, inclusive of waste, to be one inch, this would give a solid block of wood as high as a table (two and one-half feet), the same in breadth, eighteen feet in length, and of about one hundred and ten cubic feet.* The houses are enclosed in gardens; but some of them only by fencing, within which weeds luxuriate. At the rebuilding of the village, after the great flood of water, the laying out of gardens was commanded; but the industry which is required to preserve them is often wanting. Pasture grounds extend themselves, on the south side of the village, covered with fine short grass; but, with the exception of some oxen and sheep belonging to the priest, there are no cattle.

Still without servants, I proceeded with my baggage in two small boats up the river, on both sides of which rice-fields and coco-groves extended; but the latter, being concealed by a thick border of Nipa palms and lofty cane, are only visible occasionally through the gaps. The sandy banks, at first flat, became gradually steeper,

[^110]and the rock soon showed itself close at hand, with firm banks of sandy clay containing occasional traces of indistinguishable petrifactions. A small mussel* has pierced the clay banks at the water-line, in such number that they look like honeycombs. About twelve we cooked our rice in an isolated hut, amongst friendly people. The women whom we surprised in dark ragged clothing of guinara drew back ashamed, and soon after appeared in clean chequered sayas, with earrings of brass and tortoise-shell combs. When I drew a little naked girl, the mother forced her to put on a garment. About two we again stepped into the boat, and after rowing the whole night reached a small visita, Cobocobo, about nine in the forenoon. The rowers had worked without interruption for twenty-four hours, exclusive of the two hours' rest at noon, and though somewhat tired were in good spirits.

Salta Sangley ridge.

At half-past two we set out on the road over the Salta Sangley (Chinese leap) to Tragbucan, which, distant about a mile in a straight line, is situated at the place where the Calbayot, which empties on the west coast at Point Hibaton, becomes navigable for small boats. By means of these two rivers and the short but troublesome road, a communication exists between the important stations of Catarman on the north coast, and Calbayot on the west coast. The road, which at its best part is a small path in the thick wood uninvaded by the sun, and frequently is only a track, passes over slippery ridges of clay, disappearing in the mud puddles in the intervening hollows, and sometimes running into the bed of the brooks. The watershed between the Catarman and Calbayot is formed by the Salta Sangley already

[^111]mentioned, a flat ridge composed of banks of clay and sandstone, which succeed one another ladder-wise downwards on both its sides, and from which the water collected at the top descends in little cascades. In the most difficult places rough ladders of bamboo are fixed. I counted fifteen brooks on the north-east side which feed the Catarman, and about the same number of feeders of the Calbayot on the south-west side. About forty minutes past four we reached the highest point of the Salta Sangley, about ninety feet above the sea; and at half-past six we got to a stream, the highest part of the Calbayot, in the bed of which we wandered until its increasing depth forced us, in the dark, laboriously to beat out our path through the underwood to its bank; and about eight o'clock we found ourselves opposite the visita Tragbucan. The river at this place was already six feet deep, and there was not a boat. After shouting entreaties and threats for a long time, the people, who were startled out of sleep by a revolver shot, agreed to construct a raft of bamboo, on which they put us and our baggage. The little place, which consists of only a few poor huts, is prettily situated, surrounded as it is by wooded hillocks on a plateau of sand fifty feet above the reed-bordered river.

Thanks to the activity of the teniente of Catarman who accompanied me, a boat was procured without

On the Calbayot River. delay, so that we were able to continue our journey about seven o'clock. The banks were from twenty to forty feet high; and, with the exception of the cry of some rhinoceros birds which fluttered from bough to bough on the tops of the trees, we neither heard nor saw a trace of animal life. About half-past eleven we reached Taibago, a small visita, and about half-past one a similar one, Magubay; and after two hours' rest at noon, about five o'clock, we got into a current down which we skil-
fully floated, almost without admitting any water. The river, which up to this point is thirty feet broad, and on account of many projecting branches of trees difficult to navigate, here is twice as broad. About eleven at night we reached the sea, and in a complete calm rowed for the distance of a league along the coast to Calbayot, the convent at which place affords a commanding view of the islands lying before it.

A thunderstorm obliged us to postpone the journey to the chief town, Catbalogan (or Catbalonga), which was seven leagues distant, until the afternoon. In a long boat, formed out of the stem of one tree, and furnished with outriggers, we travelled along the shore, which is margined by a row of low-wooded hills with many small visitas; and as night was setting in we rounded the point of Napalisan, a rock of trachytic conglomerate shaped by perpendicular fissures with rounded edges into a series of projections like towers, which rises up out of the sea to the height of sixty feet, like a knight's

Cathalogan.

An ingenious mechanic. castle. At night we reached Catbalogan, the chief town of the island, with a population of six thousand, which is picturesquely situated in the middle of the western border, in a little bay surrounded by islands and necks of land, difficult to approach and, therefore, little guarded. Not a single vessel was anchored in the harbor.

The houses, many of which are of boards, are neater than those in Camarines; and the people, though idle, are more modest, more honorable, more obliging, and of cleaner habits, than the inhabitants of South Luzon. Through the courtesy of the governor I quickly obtained a roomy dwelling, and a servant who understood Spanish. Here I also met a very intelligent Filipino who had acquired great skill in a large variety of crafts. With the simplest tools he improved in many points on my instru-
ments and apparatus, the purpose of which he quickly comprehended to my entire satisfaction, and gave many proofs of considerable intellectual ability.

In Samar the flying monkey or lemur (the kaguang of the Bisayans-galeopithecus) is not rare. These animals, which are of the size of the domestic cat, belong to the quadrumana; but, like the flying squirrels, they are provided with a bird-like membrane, which, commencing at the neck, and passing over the fore and hinder limbs, reaches to the tail; by means of which they are able to glide from one tree to another at a very obtuse angle.* Body and membrane are clothed with a very short fur, which nearly equals the chinchilla in firmness and softness, and is on that account in great request. While I was there, six live kaguangs arrived as a present for the priest (three light grey, one dark brown, and two greyish brown; all with irregularly distributed spots); and from these I secured a little female with her young.

It appeared to be a very harmless, awkward animal. When liberated from its fetters, it remained lying on the ground with all its four limbs stretched out, and its belly in contact with the earth, and then hopped in short awkward leaps, without thereby raising itself from the ground, to the nearest wall, which was of planed boards. Arrived there, it felt about it for a long time with the sharp claw, which is bent inwards, of its fore-hand, until at length it realized the impossiblity of climbing it at any part. It succeeded by means of a corner or an accidental crevice in climbing a foot upwards, and fell down again immediately, because it had abandoned the comparatively secure footing of its hinder limbs before its fore-claws had obtained a firm hold. It

[^112]received no hurt, as the violence of the fall was broken by the flying membrane which was rapidly extended. These attempts, which were continued with steady perseverance, showed an astonishing deficiency of judgment, the animal endeavoring to do much more than was in its power to accomplish. All its endeavors, therefore, were unsuccessful, though made without doing itself any hurt-thanks to the parachute with which Nature had provided it. Had the kaguang not been in the habit of relying so entirely on this convenient contrivance, it probably would have exercised its judgment to a greater extent, and formed a more correct estimate of its ability. The animal repeated its fruitless efforts so often that I no longer took any notice of it, and after some time it disappeared: but I found it again in a dark corner, under the roof, where it would probably have waited for the night in order to continue its flight. Evidently it had succeeded in reaching the upper edge of the boarded wall by squeezing its body between this and the elastic covering of bamboo hurdle-work which lay firmly imposed upon it; so that the poor creature, which I had rashly concluded was stupid and awkward, had, under the circumstances, manifested the greatest possible skill, prudence, and perseverance.

A promise of rare animals and wild people.

A priest who was present on a visit from Calbigan promised me so many wonders in his district-abundance of the rarest animals, and Cimarrones uncivilized in the highest degree-that I accompanied him, on the following day, in his journey home. In an hour after our departure we reached the little island of Majava, which consists of perpendicular strata of a hard, finegrained, volcanic tufa, with small, bright crystals of hornblende. The island of Buat (on Coello's map) is called by our mariners Tubigan. In three hours we reached Umauas, a dependency of Calbigan. It is
situated, fifty feet above the sea, in a bay, before which (as is so often the case on this coast) a row of small picturesque islands succeed one another, and is exactly four leagues from Catbalogan. But Calbigan, which we reached towards evening, is situated two leagues N.N.E. from Umauas, surrounded by rice-fields, forty feet above the river of the same name, and almost a league and a half from its mouth. A tree with beautiful violet-blue panicles of blossoms is especially abundant on the banks of the Calbigan, and supplies a most valuable wood for building purposes in the Philippines. It is considered equal to teak, like which it belongs to the class verbenaceae; and its inland name is molave Molave. (Vitex geniculata, Blanco).

According to the statements of credible men, there are serpent-tamers in this country. They are said to pipe the serpents out of their holes, directing their movements, and stopping and handling them at will, without being injured by them. The most famous individual amongst them, however, had been carried off by the sea-pirates a short time before; another had run away to the Cimarronese in the mountains; and the third, whose reputation did not appear to be rightly established, accompanied me on my excursion, but did not justify the representations of his friends. He caught two poisonous serpents,* which we encountered on the road, by dexterously seizing them immediately behind the head, so that they were incapable of doing harm; and, when he commanded them to lie still, he took the precaution of placing his foot on their necks. In the chase I hurt my foot so severely against a sharp-pointed branch which was concealed by the mud that I was obliged to return to Catbalogan without effecting my object. The inhabitants of Calbigan are considered more active

[^113]and circumspect than those on the west coast, and they are praised for their honesty. I found them very skilful; and they seemed to take an evident pleasure in making collections and preparing plants and animals, so that I would gladly have taken with me a servant from the place; but they are so reluctant to leave their village that all the priest's efforts to induce one to ride with us were fruitless.

At a short distance north-west from Catbalogan a most luxuriant garden of corals is to be observed in less than two fathoms, at the ebb. On a yellow carpet of calcareous polyps and sponges, groups of leather-like stalks, finger-thick, lift themselves up like stems of vegetable growth; their upper ends thickly covered with polyps (Sarcophyton pulmo Esp.), which display their roses of tentacula wide open, and resplendent with the most beautiful varying colors, looking, in fact, like flowers in full bloom. Very large serpulites extend from their calcareous tubes, elegant red, blue, and yellow crowns of feelers, and, while little fishes of marvellously gorgeous color dart about in this fairy garden, in their midst luxuriantly grow delicate, feathered plumulariae.

Ornamental but useless forts.

Bad weather and the flight of my servant, who had gambled away some money with which he had been entrusted, at a cock-fight, having detained me some days in the chief town, I proceeded up the bay, which extends southwards from Catbalogan and from west to east as far as Paranas. Its northern shore consists of ridges of earth, regular and of equal height, extending from north to south, with gentle slopes towards the west, but steep declivities on the east, and terminating abruptly towards the sea. Nine little villages are situated on this coast between Catbalogan and Paranas. From the hollows, amidst coco and betel palms, they expand in isolated groups of houses up the gentle western slopes, and, on
reaching the summit, terminate in a little castle, which hardly affords protection against the pirates, but generally forms a pretty feature in the landscape. In front of the southern edge of the bay, and to the southwest, many small islands and wooded rocks are visible, with the mountains of Leyte in the high-ground, constituting an ever-shifting series of views.

As the men, owing to the sultry heat, the complete calm, and almost cloudless sky, slept quite as much as they rowed, we did not reach Paranas before the afternoon. It is a clean village, situated on a declivity between twenty and a hundred and fifty feet above the sea. The sides, which stand perpendicularly in the sea, consist of grey banks of clay receding landwards, and overspread with a layer of fragments of mussels, the intervals between which are filled up with clay, and over the latter is a solid breccia, cemented with lime, composed of similar fragments. In the clay banks are well-preserved petrifactions, so similar in color, habitat, and aspect to many of those in the German tertiary fcrmations that they might be taken for them. The breccia also is fossil, probably also tertiary; at all events, the identity of the few species which were recognisable in it-Cerithium, Pecten, and Venus-with living species could not be determined.*

On the following morning I proceeded northwards by a small canal, through a stinking bog of rhizophora (man-

A canal through the bog. groves), and then continued my journey on land to Loquilocun, a little village which is situated in the forest. Half-way we passed through a river, twenty feet broad, flowing east to west, with steep banks rendered accessible by ladders.

[^114]Hammocktravelling.

Poor roads.

Running the rapids.

Loquilocun.

As I still continued lame (wounds in the feet are difficult to heal in warm countries), I caused myself to be carried part of the way in the manner which is customary hereabouts. The traveller lies on a loose mat, which is fastened to a bamboo frame, borne on the shoulders of four robust polistas. About every ten minutes the bearers are relieved by others. As a protection against sun and rain, the frame is furnished with a light roof of pandanus.

The roads were pretty nearly as bad as those at the Salta Sangley; and, with the exception of the sea-shore, which is sometimes available, there appear to be none better in Samar. After three hours we reached the Loquilocun, which, coming from the north, here touches its most southerly point, and then flows south-east to the great ocean. Through the kind care of the governor, I found two small boats ready, which were propelled with wonderful dexterity by two men squatted at the extreme ends, and glided between the branches of the trees and rocks into the bed of the rapid mountain torrent. Amidst loud cheers both the boats glided down a cascade of a foot and a half in height without shipping any water.

The little village of Loquilocun consists of three groups of houses on three hillocks. The inhabitants were very friendly, modest, and obliging, and so successful in collecting that the spirits of wine which I had with me was quickly consumed. In Catbalogan my messengers were able with difficulty to procure a few small flasks. Through the awkward arrangements of a too obliging friend, my own stores, having been sent to a wrong address, did not reach me until some months afterwards; and the palm-wine, which was to be bought in Samar, was too weak. One or two boats went out daily to fish for me; but I obtained only a few specimens,
which belonged to almost as many species and genera. Probably the bad custom of poisoning the water in order to kill the fish (the pounded fruit of a Barringtonia here being employed for the purpose) is the cause of the river being so empty of fish.

After a few days we left the little place about halfpast nine in the forenoon, packed closely in two small boats; and, by seven minutes past one when we reached an inhabited hut in the forest, we had descended more than forty streams of a foot and a foot and a half and more in depth. The more important of them have names which are correctly given on Coello's map; and the following are their distances by the watch:-At ten o'clock we came to a narrow, rocky chasm, at the extremity of which the water falls several feet below into a large basin; and here we unloaded the boats, which hitherto had, under skilful management, wound their way, like well-trained horses, between all the impediments in the bed of the river and over all the cascades and waves, almost without taking any water; only two men remaining in each boat, who, loudly cheering, shot downwards; in doing which the boats were filled to the brim.

Opposite this waterfall a bank of rubbish had been

Numerous small streams. formed by the alluvium, in which, besides fragments of the subjacent rock, were found well-rounded pieces of jasper and porphyry, as well as some bits of coal containing several pyrites, which had probably been brought during the rain from higher up the river. Its origin was unknown to the sailors. From fifty-six minutes past eleven to twelve o'clock there was an uninterrupted succession of rapids, which were passed with the greatest dexterity, without taking in water. Somewhat lower down, at about three minutes past twelve, we took in so much water that we were compelled to land and bale
it out. At about fifteen minutes past twelve, we proceeded onwards, the river now being on the average sixty feet broad. On the edge of the wood some slender palms, hardly ten feet high, were remarkable by their frequency, and many phalænopses by their display of blossoms, which is of rare occurrence. Neither birds nor apes, nor serpents were observed; but large pythons, as thick as one's leg are said to be not unfrequent.

About thirty-six minutes past twelve we reached one of the most difficult places-a succession of waves, with many rocks projecting out of the water, between which the boats, now in full career, and with rapid evolutions, glided successfully. The adventure was accomplished with equal skill by the two crews, who exerted their powers to the utmost. At seventeen minutes past one we arrived at Dini, the most considerable waterfall in the whole distance; and here we had to take the boats out of the water; and, availing ourselves of the lianas which hung down from the lofty forest trees like ropes, we dragged them over the rocks. At twenty-one minutes past two we resumed our journey; and from twentytwo minutes past to half past eight we descended an irregular stair composed of several ledges, shipping much water. Up to this point the Loquilocun flowed in a rocky bed, with (for the most part) steep banks, and sometimes for a long distance under a thick canopy of boughs, from which powerful tendrils and ferns, more than a fathom in length, were suspended. Here the country was to some extent open; flat hillocks, with low underwood, came to view, and, on the north-west, loftier wooded mountains. The last two hours were notable for a heavy fall of rain, and, about half past five, we reached a solitary house occupied by friendly people, where we took up our quarters for the night.

On the following morning the journey was continued down the river. Within ten minutes we glided past the last waterfall, between white calcareous rocks of a kind of marble, covered with magnificent vegetation. Branches, completely covered with phalænopses ( $P$. Aphrodite, Reichb. fls.), projected over the river, their flowers waving like large gorgeous butterflies over its foaming current. Two hours later the stream became two hundred feet broad, and, after leaping down a ladder of fifty meters in height from Loquilocun, it steals away in gentle windings through a flat inundated country to the east coast; forming a broad estuary, on the right bank of which, half a league from the sea, the district of Jubasan or Paric (population 2,300) is situated. The latter give their names to the lower portion of the stream. Here the excellent fellows of Loquilocun left me in order to begin their very arduous return journey.

Owing to bad weather, I could not embark for Tubig (population 2,858), south of Paric, before the following day; and, being continually hindered by difficulties of land transit, I proceeded in the rowboat along the coast to Borongan (population 7,685), with the equally intelligent and obliging priest with whom I remained some days, and then continued my journey to Guiuan (also Guiuang, Guiguan), the most important district in Samar (population 10,781 ), situated on a small neck of land which projects from the south-east point of the island into the sea.

Close to the shore at the latter place a copious spring bursts out of five or six openings, smelling slightly of sulphuretted hydrogen. It is covered by the sea during the flow, but is open during the ebb, when its salt taste is hardly perceptible. In order to test the water, a well was formed by sinking a deep bottomless jar, and from this, after the water had flowed for the space of half
an hour, a sample was taken, which, to my regret, was afterwards lost. The temperature of the water of the spring, at eight o'clock in the forenoon, was $27.7^{\circ}$; of the atmosphere, $28.7^{\circ}$; of the sea-water, $31.2^{\circ} \mathrm{C}$. The spring is used by the women to dye their sarongs. The materials, after being steeped in the decoction of a bark abounding in tannin (materials made of the abacá are first soaked in a calcareous preparation), and dried in the sun, are placed in the spring during the ebb, taken out during the flow, re-dried, dipped in the decoction of bark, and again, while wet, placed in the spring; and this is repeated for the space of three days; when the result is a durable, but ugly inky black (gallussaures, oxide of iron).

At Loquilocun and Borongan I had an opportunity of purchasing two live macaques.* These extremely delicate and rare little animals, which belong to the class of semi-apes, are, as I was assured in Luzon and Leyte, to be found only in Samar, and live exclusively on charcoal. My first "mago" was, in the beginning, somewhat voracious, but he disdained vegetable food, and was particular in his choice of insects, devouring live grasshoppers with delight. $\dagger$ It was extremely ludicrous, when he was fed in the day time, to see the animal standing, perched up perpendicularly on his two thin legs with his bare tail, and turning his large head-round as a ball, and with very large, yellow, owl-like eyes-in every direction, looking like a dark lantern on a pedestal with a circular swivel. Only gradually did he succeed in fixing his eyes on the object presented to him; but, as soon as he did perceive it,

[^115]he immediately extended his little arms sideways, as though somewhat bashful, and then, like a delighted child, suddenly seizing it with hand and mouth at once, he deliberately tore the prey to pieces. During the day the mago was sleepy, short-sighted, and, when disturbed, morose; but with the decreasing daylight he expanded his pupils, and moved about in a lively and agile manner, with rapid noiseless leaps, generally sideways. He soon became tame, but to my regret died after a few weeks; and I succeeded only for a short time in keeping the second little animal alive.

## XX

In Guiuan I was visited by some Micronesians, who for the last fourteen days had been engaged at Sulangan on the small neck of land south-east from Guiuan, in diving for pearl mussels (mother-of-pearl), having undertaken the dangerous journey for the express purpose.*

They had sailed from Uleai (Uliai, $7^{\circ} 20^{\prime} \mathrm{N} ., 143^{\circ} 57^{\prime}$ E. Gr.) in five boats, each of which had a crew of nine

Pearl divers
from the Carolines.

Hardships and perils of their voyage. men and carried forty gourds full of water, with coconuts and batata. Every man received one coconut daily, and two batatas, which they baked in the ashes of the coco shells; and they caught some fish on the way, and collected a little rain-water. During the day they directed their course by the sun, and at night by the

[^116]stars. A storm destroyed the boats. Two of them sank, together with their crews, before the eyes of their companions, and of these, only one-probably the sole individual rescued-two weeks afterwards reached the harbor of Tandag, on the east coast of Mindanao. The party remained at Tandag two weeks, working in the fields for hire, and then proceeded northwards along the coast to Cantilang, $8^{\circ} 25^{\prime}$ N.; Banouan (called erroneously Bancuan by Coello), $9^{\circ} 1^{\prime} \mathrm{N}$.; Taganaan, $9^{\circ} 25^{\prime}$ N.; thence to Surigao, on the north point of Mindanao; and then, with an easterly wind, in two days, direct to Guiuan. In the German translation of Captain Salmon's "History of the Oriental Islands" (Altona, 1733), it is stated that:

Castaways from the Peleus.
'Some other islands on the east of the Philippines have lately been discovered which have received the name of the New Philippines because they are situated in the neighborhood of the old, which have been already described. Father Clan (Clain), in a letter from Manila, which has been incorporated in the 'Philosophical Transactions,' makes the following statement respecting them:-It happened that when he was in the town of Guivam, on the island of Samar, he met twenty-nine Palaos (there had been thirty, but one died soon after in Guiuan), or natives of certain recently discovered islands, who had been driven thither by the east winds, which prevail from December to May. According to their own statement, they were driven about by the winds for seventy days, without getting sight of land, until they arrived opposite to Guivam. When they sailed from their own country, their two boats were quite full, carrying thirty-five souls, including their wives and children; but several had died miserably on the way from the fatigue which they had undergone. When some one from Guivam wished to go on board to them, they were thrown into such a state of terror that all who were in one of the boats sprang overboard, along with their wives and children. However, they at last thought it
best to come into the harbor; so they came ashore on December 28, 1696. They fed on coconuts and roots, which were charitably supplied to them, but refused even to taste cooked rice, which is the general food of the Asiatic nations. Two women who had previously been cast away on the same islands acted as interpreters for them. ${ }^{* * *}$
"The people of the country went half naked, and the men painted their bodies with spots and all kinds of devices. $* * *$ As long as they were on the sea they lived on fish, which they caught in a certain kind of fish-basket, with a wide mouth but tapering to a point at the bottom, which was dragged along underneath the boats; and rain-water, when they could catch it (or, as is stated in the letter itself, preserved in the shells of the coconut), served them for drink. When they were about to be taken into the presence of the Father, whom, from the great respect which was shown to him, they took for the governor, they colored their bodies entirely yellow, an operation which they considered highly important, as enabling them to appear as persons of consideration. They are very skilful divers, and now and then find pearls in the mussels which they bring up, which, however, they throw away as useless things."

But one of the most important parts of Father Clain's letter has been omitted by Capt. Salmon:-"The oldest of these strangers had once before been cast away on the coast of the province of Caragan, on one of our islands (Mindanao); but as he found only heathens (infidels), who lived in the mountains or on the desert shore, he returned to his own country."

In a letter from Father Cantova to Father d'Aubenton, dated from Agdana (i.e. Agaña, of the Marianne Islands),

Not the first time for one. March 20, 1722, describing the Caroline and Pelew Islands, it is said:-"The fourth district lies to the west. Yap ( $9^{\circ} 25^{\prime}$ N., $138^{\circ} 1^{\prime} \mathrm{E}$. Gr.),* which is the principal island,

[^117]is more than forty leagues in circumference. Besides the different roots which are used by the natives of the island instead of bread, there is the batata, which they call camote, and which they have acquired from the Philippines, as I was informed by one of our Caroline Indians, who is a native of the island. He states that his father, named Coorr, * * * three of his brothers, and himself had been cast away in a storm on one of the provinces in the Philippines, which was called Bisayas; that a missionary of our society (Jesus) received them in a friendly manner $* * *$ that on returning to their own island they took with them the seeds of different plants,

Other arrivals of Micronesians. amongst others the batata, which multiplied so fast that they had sufficient to supply the other islands of the Archipelago with them." Murillo Velarde states that in 1708 some Palaos were wrecked in a storm on Palapag (north coast of Samar); and I personally had the opportunity, in Manila, of photographing a company of Palaos and Caroline islanders, who had been the year before cast on the coast of Samar by foul weather. Apart from the question of their transport, whether voluntary or not, these simply were six examples, such as still occur occasionally, of Micronesians cast up on the shore of the Philippines; and probably it would not be difficult to find several more; but how often, both before and after the arrival of the Spaniards, might not vessels from those islands have come within the influence of the northeast storms, and been driven violently on the east coast of the Philippines without any record of such facts being preserved?* Even as, on the west side of the Archipelago, the type of the race seems to have been modified by its long intercourse with China, Japan, Lower India, and later with Europe, so likewise may Poly-

[^118]nesian influences have operated in a similar manner on the east side; and the further circumstance that the inhabitants of the Ladrones* and the Bisayans $\dagger$ possess the art of coloring their teeth black, seems to point to early intercourse between the Bisayans and the Polynesians. $\ddagger$

At Guiuan I embarked on board an inconveniently cranky, open boat, which was provided with an awning

Possible
influence on Filipinos.

A futile sea voyage in an open boat. only three feet square, for Tacloban, the chief town of Leyte. After first experiencing an uninterrupted calm, we incurred great danger in a sudden tempest, so that we had to retrace the whole distance by means of the oars. The passage was very laborious for the crew, who were not protected by an awning (temperature in the sun $35^{\circ} \mathrm{R}$., of the water $25^{\circ} \mathrm{R}$.§), and lasted thirty-one hours, with few intermissions; the party voluntarily abridging their intervals of rest in order to get back quickly to Tacloban, which keeps up an active intercourse with Manila, and has all the attractions of a luxurious city for the men living on the inhospitable eastern coast. It is questionable whether the sea anywhere washes over a spot of such peculiar beauty as the narrow strait which divides Samar from Leyte. On the west it is enclosed by steep banks of tuff, which tolerate no swamps of mangroves on their borders. There the lofty primeval forest approaches in all its sublimity close to the shore, interrupted only here and there by groves of cocos, in whose sharply defined shadows solitary

[^119]Beauty of Samar-Leyte strait.
huts are to be found; and the steep hills facing the sea, and numerous small rocky islands, are crowned with little castles of blocks of coral. At the eastern entrance of the strait the south coast of Samar consists of white limestone, like marble, but of quite modern date, which in many places forms precipitous cliffs.* At NipaNipa, a small hamlet two leagues from Basey, they project into the sea in a succession of picturesque rocks, above one hundred feet in height, which, rounded above like a dome, thickly covered with vegetation, and corroded at the base by the waters of the sea, rise out of the waves like gigantic mushrooms. A peculiar atmosphere of enchantment pervades this locality, whose influence upon the native mariner must be all the more powerful when, fortunately escaping from the billows outside and the buffeting of the north-east wind, he suddenly enters this tranquil place of refuge. No wonder that superstitious imagination has peopled the place with spirits.

Burial caves.
In the caverns of these rocks the ancient Pintados interred the corpses of their heroes and ancestors in welllocked coffins, surrounded by those objects which had been held in the highest regard by them during life. Slaves were also sacrificed by them at their obsequies, in order that they might not be without attendance in the world of shadows; $\dagger$ and the numerous coffins, imple-

[^120]ments, arms, and trinkets, protected by superstitious terrors, continued to be undisturbed for centuries. No boat ventured to cross over without the obsevance of a religious ceremony, derived from heathen times, to propitiate the spirits of the caverns who were believed to punish the omission of it with storm and ship-wreck.

About thirty years ago a zealous young ecclesiastic, to whom these heathen practices were an abomination,

Objects destroyed but superstition persists. determined to extirpate them by the roots. With several boats well equipped with crosses, banners, pictures of saints, and all the approved machinery for driving out the Devil, he undertook the expedition against the haunted rocks, which were climbed amidst the sounds of music, prayers, and the reports of fireworks. A whole pailful of holy water first having been thrown into the cave for the purpose of confounding the evil spirits, the intrepid priest rushed in with elevated cross, and was followed by his faithful companions, who were fired with his example. A brilliant victory was the reward of the wellcontrived and carefully executed plot. The coffins were broken to fragments, the vessels dashed to pieces, and the skeletons thrown into the sea; and the remaining caverns were stormed with like results. The objects of superstition have indeed been annihilated, but the superstition itself survives to the present day.

I subsequently learned from the priest at Basey that there were still some remains on a rock, and a few days

Skulls from a rock near Basey. afterwards the worthy man surprised me with several skulls and a child's coffin, which he had had brought from the place. Notwithstanding the great respect in which he was held by his flock, he had to exert all his powers of persuasion to induce the boldest of them to engage in so daring an enterprise. A boat manned by sixteen rowers was fitted out for the purpose; with a smaller crew they would not have ventured to under-

The cavern's contents.

Impressive location of burial cave.
take the journey. On their return home a thunderstorm broke over them, and the sailors, believing it to be a punishment for their outrage, were prevented only by the fear of making the matter worse from throwing coffin and skulls into the sea. Fortunately the land was near, and they rowed with all their might towards it; and, when they arrived, I was obliged to take the objects out of the boat myself, as no native would touch them.

Notwithstanding, I was the next morning successful in finding some resolute individuals who accompanied me to the caverns. In the first two which we examined we found nothing; the third contained several broken coffins, some skulls, and potsherds of glazed and crudely painted earthenware, of which, however, it was impossible to find two pieces that belonged to each other. A narrow hole led from the large cavern into an obscure space, which was so small that one could remain in it only for a few seconds with the burning torch. This circumstance may explain the discovery, in a coffin which was eaten to pieces by worms, and quite mouldered away, of a well-preserved skeleton, or rather a mummy, for in many places there were carcasses clothed with dry fibers of muscle and skin. It lay upon a mat of pandanus, which was yet recognizable, with a cushion under the head stuffed with plants, and covered with matting of pandanus. There were no other remains of woven material. The coffins were of three shapes and without any ornament. Those of the first form, which were of excellent molave-wood, showed no trace of wormholes or decay, whereas the others had entirely fallen to dust; and those of the third kind, which were most numerous, were distinguishable from the first only by a less curved form and inferior material.

No legend could have supplied an enchanted royal sepulchre_with a more suitable approach than that of
the last of these caverns. The rock rises out of the sea with perpendicular sides of marble, and only in one spot is to be observed a natural opening made by the water, hardly two feet high, through which the boat passed at once into a spacious court, almost circular, and over-arched by the sky, the floor of which was covered by the sea, and adorned with a garden of corals. The steep sides are thickly hung with lianas, ferns, and orchids, by help of which one climbs upwards to the cavern, sixty feet above the surface of the water. To add to the singularity of the situation, we also found at the entrance to the grotto, on a large block of rock projecting two feet above the ground, a sea-snake, which tranquilly gazed at us, but which had to be killed, because, like all genuine sea-snakes, it was poisonous. Twice before I had found the same species in crevices of rock on the dry land, where the ebb might have left it; but it was strange to meet with it in this place, at such a height above the sea. It now reposes, as Platurus fasciatus Daud., in the Zoological Museum of the Berlin University.

In Guiuan I had an opportunity of purchasing four Chinese dishers richly painted Chinese dishes which came from a similar cavern, and a gold signet ring; the latter consisting of a plate of gold, originally bent into a tube of the thickness of a quill with a gaping seam, and afterwards into a ring as large as a thaler, which did not quite meet. The dishes were stolen from me at Manila.

There are similar caverns which have been used as burialplaces in many other localities in this country; on the island of Andog, in Borongan (a short time ago it contained skulls); alsoatBatinguitan, three hours fromBorongan, on the banks of a little brook; and in Guiuan, on the little island of Monhon, which is difficult of approach by reason of the boisterous sea. In Catubig trinkets of gold have been found, but they have been converted
into modern articles of adornment. One cavern at Lauang, however, is famous over the whole country on account of the gigantic, flat, compressed skulls, without sutures, which have been found in it.* It will not be uninteresting to compare the particulars here described with the statements of older authors; and for this reason I submit the following extracts:-

Mas (Informe, i. 21), who does not give the sources of his information, thus describes the customs of the ancient inhabitants of the archipelago at their inter-ments:-They sometimes embalmed their dead with aromatic substances $* * *$ and placed those who were of note in chests carved out of a branch of a tree, and furnished with well-fitted lids $* * *$ The coffin was placed, in accordance with the wish of the deceased, expressed before his death, either in the uppermost room of the house, where articles of value were secreted, or under the dwelling-house, in a kind of grave, which was not covered, but enclosed with a railing; or in a distant field, or on an elevated place or rock on the bank of a river, where he might be venerated by the pious. A watch was set over it for a certain time, lest boats should cross over, and the dead person should drag the living after him.
According to Gaspar San Agustín (p. 169), the dead were rolled up in cloths, and placed in clumsy chests, carved out of a block of wood, and buried under their houses, together with their jewels, gold rings, and some plates of gold over the mouth and eyes, and furnished with provisions, cups, and dishes. They were also accustomed to bury slaves along with men of note, in order that they might be attended in the other world.

[^121]"Their chief idolatry consisted in the worship of those of their ancestors who had most distinguished themselves by courage and genius, whom they regarded as deities * * * * They called them humalagar, which is the same as manes in the Latin $* * *$ Even the aged died under this conceit, choosing particular places, such as one on the island of Leyte, which allowed of their being interred at the edge of the sea, in order that the mariners who crossed over might acknowledge them as deities, and pay them respect." (Thévenot, Religieux, p. 2.)
"They did not place them (the dead) in the earth, but in coffins of very hard, indestructible wood $* * *$

Slaves sacrificed. Male and female slaves were sacrificed to them, that they should not be unattended in the other world. If a person of consideration died, silence was imposed upon the whole of the people, and its duration was regulated by the rank of the deceased; and under certain circumstances it was not discontinued until his relations had killed many other persons to appease the spirit of the dead." (Ibid., p. 7.)
"For this reason (to be worshipped as deities) the oldest of them chose some remarkable spot in the mountains, and particularly on headlands projecting into the sea, in order to be worshipped by the sailors." (Gemelli Careri, p. 449.)

From Tacloban, which I chose for my headquarters on account of its convenient tribunal, and because it

Basey and its river. is well supplied with provisions, I returned on the following day to Samar, and then to Basey, which is opposite to Tacloban. The people of Basey are notorious over all Samar for their laziness and their stupidity, but are advantageously distinguished from the inhabitants of Tacloban by their purity of manners. Basey is situated on the delta of the river, which is named after it. We proceeded up a small arm of the principal stream, which
winds, with a very slight fall, through the plain; the brackish water, and the fringe of nipa-palms which accompanies it, consequently extending several leagues into the country. Coco plantations stretch behind them; and there the floods of water (avenidas), which sometimes take place in consequence of the narrow rocky bed of the upper part of the river, cause great devastation, as was evident from the mutilated palms which, torn away from their standing-place, rise up out of the middle of the river. After five hours' rowing we passed out of the flat country into a narrow valley, with steep sides of marble, which progressively closed in and became higher. In several places they are underwashed, cleft, and hurled over each other, and with their naked side-walls form a beautiful contrast to the blue sky, the clear, greenish river, and the luxuriant lianas, which, attaching themselves to every inequality to which they could cling, hung in long garlands over the rocks.

A frontage.

A beautiful grotto.

The stream became so rapid and so shallow that the party disembarked and dragged the boat over the stony bed. In this manner we passed through a sharp curve, twelve feet in height, formed by two rocks thrown opposite to each other, into a tranquil oval-shaped basin of water enclosed in a circle of limestone walls, inclining inwards, of from sixty to seventy feet in height; on the upper edge of which a circle of trees permitted only a misty sunlight to glimmer through the thick foliage. A magnificent gateway of rock, fifty to sixty feet high, and adorned with numerous stalactites, raised itself up opposite the low entrance; and through it we could see, at some distance, the upper portion of the river bathed in the sun. A cavern of a hundred feet in length, and easily climbed, opened itself in the left side of the oval court, some sixty feet above the surface of the water; and it ended in a small gateway, through which you
stepped on to a projection like a balcony, studded with stalactites. From this point both the landscape and the rocky cauldron are visible, and the latter is seen to be the remainder of a stalactitic cavern, the roof of which has fallen in. The beauty and peculiar character of the place have been felt even by the natives, who have called it Sogoton (properly, a bay in the sea). In the very hard limestone, which is like marble, I observed traces of bivalves and multitudes of spines of the sea-urchin, but no well-defined remains could be knocked off. The river could still be followed a short distance further upwards; and in its bed there were disjointed fragments of talcose and chloritic rocks.

A few small fishes were obtained with much difficulty; Fishing. and amongst them was a new and interesting species, viviparous.* An allied species (H. fluviatilis, Bleeker) which I had two years previously found in a limestone cavern on Nusa Kambangan, in Java, likewise contained living young ones. The net employed in fishing appears to be suited to the locality, which is a shallow river, full of transparent blocks. It is a fine-meshed, longish, four-cornered net, having its ample sides fastened to two poles of bamboo, which at the bottom were provided with a kind of wooden shoes, which curve upwards towards the stems when pushed forwards. The fisherman, taking hold of the upper ends of the poles, pushes the net, which is held obliquely before him, and the wooden shoes cause it to slide over the stones, while another person drives the fish towards him.

On the right bank, below the cavern, and twenty feet Fossil beds. above the surface of the water, there are beds of fossils, pectunculus, tapes, and placuna, some of which, from the fact of their barely adhering by the tip, must be of very recent date. I passed the night in a small hut,

[^122]which was quickly erected for me, and on the following day attempted to pass up the river as far as the limits of the cyrstalline rock, but in vain. In the afternoon we set out on our return to Basey, which we reached at night.

Recent elevation of coast.

Basey is situated on a bank of clay, about fifty feet above the sea, which towards the west elevates itself into a hill several hundred feet in height, and with steep sides. At twenty-five to thirty feet above the sea I found the same recent beds of mussels as in the stalactitic cavern of Sogoton. From the statements of the parish priest and of other persons, a rapid elevation of the coasts seems to be taking place in this country. Thirty years ago ships could lie alongside the land in three fathoms of water at the flood, whereas the depth at the same place now is not much more than one fathom. Immediately opposite to Basey lie two small islands, Genamok and Tapontonan, which, at the present time, appear to be surrounded by a sandbank at the lowest ebb-tide. Twenty years ago nothing of the kind was to be seen. Supposing these particulars to be correct, we must next ascertain what proportion of these changes of level is due to the floods, and how much to volcanic elevation; which, if we may judge by the neighboring active solfatara at Leyte, must always be of considerable amount.

As the priest assured us, there are crocodiles in the river Basey over thirty feet in length, those in excess of twenty feet being numerous. The obliging father promised me one of at least twenty-four feet, whose skeleton I would gladly have secured; and he sent out some men who are so practised in the capture of these animals that they are dispatched to distant places for the purpose. Their contrivance for capturing them, which I, however, never personally witnessed, consists of a light raft of bamboo, with a stage, on which, several
feet above the water, a dog or a cat is bound. Alongside the animal is placed a strong iron hook, which is fastened to the swimming bamboo by means of fibers of abacá. The crocodile, when it has swallowed the bait and the hook at the same time, endeavors in vain to get away, for the pliability of the raft prevents its being torn to pieces, and the peculiar elasticity of the bundle of fibers prevents its being bitten through. The raft serves likewise as a buoy for the captured animal. According to the statements of the hunters, the large crocodiles live far from human habitations, generally selecting the close vegetation in an oozy swamp, in which their bellies, dragging heavily along, leave trails behind them which betray them to the initiated. After a week the priest mentioned that his party had sent in three crocodiles, the largest of which, however, measured only eighteen feet, but that he had not kept one for me, as he hoped to obtain one of thirty feet. His expectation, however, was not fulfilled.

In the environs of Basey the Ignatius bean grows in Ignatius bean remarkable abundance, as it also does in the south of Samar and in some other of the Bisayan islands. It is not met with in Luzon, but it is very likely that I have introduced it there unwittingly. Its sphere of propagation is very limited; and my attempts to transplant it to the Botanical Garden of Buitenzorg were fruitless. Some large plants intended for that purpose, which during my absence arrived for me at Daraga, were incorporated by one of my patrons into his own garden; and some, which were collected by himself and brought to Manila, were afterwards lost. Every effort to get these seeds (kernels), which are used over the whole of Eastern Asia as medicine, to germinate mis-

Strychnine.

Cholera and snake-bite cure.
carried, they having been boiled before transmission, ostensibly for their preservation, but most probably to secure the monopoly of them.
According to Flueckinger,* the gourd-shaped berry of the climbing shrub (Ignatia amara, L. Strychnos Ignatii, Berg. Ignatiana Philippinica. Lour.) contains twenty-four irregular egg-shaped seeds of the size of an inch which, however, are not so poisonous as the Ignatius beans, which taste like crack-nuts. In these seeds strychnine was found by Pelletier and Caventou in 1818, as it subsequently was in crack-nuts. The former contained twice as much of it as the latter, viz. one and a half per cent; but, as they are four times as dear, it is only produced from the latter.
In many households in the Philippines the dangerous drug is to be found as a highly prized remedy, under the name of Pepita de Catbalonga. Gemelli Careri mentions it, and quotes thirteen different uses of it. Dr. Rosenthal ("Synopsis Plantarum Diaphor." p. 363) says:-"In India it has been employed as a remedy against cholera under the name of Papecta." Papecta is probably a clerical error. In K. Lall Dey's "Indigenous Drugs of India," it is called Papeeta, which is pronounced Pepita in English; and Pepita is the Spanish word for the kernel of a fruit. It is also held in high estimation as an antidote for the bite of serpents. Father Blanco ("Flora of the Philippines," 61), states that he has more than once proved its efficacy in this respect in his own person; but he cautions against its employment internally, as it had been fatal in very many cases. It should not be taken into the mouth, for should the spittle be swallowed, and vomiting not ensue, death would be inevitable. The parish priest of Tabaco, however, almost always

[^123]carried a pepita in his mouth. From 1842 he began occasionally to take an Ignatius bean into his mouth as a protection against cholera, and so gradually accustomed himself to it. When I met him in 1860 he was quite well, and ascribed his health and vigor expressly to that habit. According to his communication, in cases of cholera the decoction was successfully administered in small doses introduced into tea; but it was most efficacious when, mixed with brandy, it was applied as a liniment.

Huc also ("Thibet," I. 252) commends the expressed juice of the kouo-kouo ((Faba Ign. amar.), both for internal and external use, and remarks that it plays a

Superstitions regarding the "Bisayan" bean. great part in Chinese medicine, no apothecary's shop being without it. Formerly the poisonous drug was considered a charm, as it is still by many. Father Camel* states that the Catbalogan or Bisayan-bean, which the Indians call Igasur or Mananaog (the victorious), was generally worn as an amulet round the neck, being a preservative against poison, contagion, magic, and philtres, so potent, indeed, that the Devil in propia persona could not harm the wearer. Especially efficacious is it against a poison communicated by breathing upon one, for not only does it protect the wearer, but it kills the individual who wishes to poison him. Camel further mentions a series of miracles which superstition ascribed to the Ignatius bean.

On the southern half of the eastern border, on the Coconuts. shore from Borongan by Lauang as far as Guiuan, there are considerable plantations of cocos, which are most imperfectly applied to the production of oil. From Borongan and its visitas twelve thousand pitchers of coconut oil are yearly exported to Manila, and the nuts consumed by men and pigs would suffice for at least

[^124]eight thousand pitchers. As a thousand nuts yield eight pitchers and a half, the vicinity of Borongan alone yields annually six million nuts; for which, assuming the average produce at fifty nuts, one hundred-twenty thousand fullbearing palms are required. The statement that their number in the above-mentioned district amounts to several millions must be an exaggeration.
Getting coco oil. The oil is obtained in a very rude manner. The kernel is rasped out of the woody shell of the nut on rough boards, and left to rot; and a few boats in a state of decay, elevated on posts in the open air, serve as reservoirs, the oil dropping through their crevices into pitchers placed underneath; and finally the boards are subjected to pressure. This operation, which requires several months for its completion, yields such a bad, dark-brown, and viscid product that the pitcher fetches only two dollars and a quarter in Manila, while a superior oil costs six dollars.*
oil factory. Recently a young Spaniard has erected a factory in Borongan for the better preparation of oil. A winch, turned by two carabaos, sets a number of rasps in motion by means of toothed wheels and leather straps. They are somewhat like a gimlet in form, and consist of five iron plates, with dentated edges, which are placed radiating on the end of an iron rod, and close together, forming a blunt point towards the front. The other end of the rod passes through the center of a disk, which communicates the rotary motion to it, and projects beyond it. The workman, taking a divided coconut in his two hands, holds its interior arch, which contains the oil-bearing nut, with a firm pressure against the revolving rasp, at the same time urging with his breast,

[^125]which is protected by a padded board, against the projecting end of the rod. The fine shreds of the nut remain for twelve hours in flat pans, in order that they may be partially decomposed. They are then lightly pressed in hand-presses; and the liquor, which consists of one-third oil and two-thirds water, is caught in tubs, from which, at the end of six hours, the oil, floating on the surface, is skimmed off. It is then heated in iron pans, containing 100 liters, until the whole of the water in it has evaporated, which takes from two to three hours. In order that the oil may cool rapidly, and not become dark in color, two pailfuls of cold oil, freed from water, are poured into it, and the fire quickly removed to a distance. The compressed shreds are once more exposed to the atmosphere, and then subjected to a powerful pressure. After these two operations have been twice repeated, the rasped substance is suspended in sacks between two strong vertical boards and crushed to the utmost by means of clamp screws, and repeatedly shaken up. The refuse serves as food for pigs. The oil which runs from the sacks is free from water, and is consequently very clear, and is employed in the cooling of that which is obtained in the first instance.*

The factory produces fifteen hundred tinajas of oil. It is in operation only nine months in the year; from December to February the transport of nuts being prevented by the tempestuous seas, there being no land communication. The manufacturer was not successful in procuring nuts from the immediate vicinity in sufficient quantity to enable him to carry on his operations

[^126]Illogical business.

Sugar venders. ate prices.
without interruption, nor, during the favorable season of the year, could he lay up a store for the winter months, although he paid the comparatively high price of three dollars per thousand.

While the natives manufactured oil in the manner just described, they obtained from a thousand nuts three and a half pots, which, at six reals each, fetched twenty-one reals; that is three reals less than was offered them for the raw nuts. These data, which are obtained from the manufacturers, are probably exaggerated, but they are in the main well founded; and the traveller in the Philippines often has the opportunity of observing similar anomalies. For example, in Daet, North Camarines, I bought six coconuts for one cuarto, at the rate of nine hundred and sixty for one dollar, the common price there. On my asking why no oilfactory had been erected, I received for answer that the nuts were cheaper singly than in quantities. In the first place, the native sells only when he wants money; but he knows that the manufacturer cannot well afford to have his business suspended; so, careless of the result, he makes a temporary profit, and never thinks of ensuring for himself a permanent source of income.

In the province of Laguna, where the natives prepare coarse brown sugar from sugar-cane, the women carry it for leagues to the market, or expose it for sale on the country roads, in small loaves (panoche), generally along with buyo. Every passenger chats with the seller, weighs the loaf in the hand, eats a bit, and probably passes on without buying any. In the evening the woman returns to her home with her wares, and the. next day repeats the same process.

I have lost my special notes, but I remember that in two cases at least the price of the sugar in these loaves was cheaper than by the picul. Moreover, the

Government of the day anticipated the people in setting the example, by selling cigars cheaper singly than in quantities.

In Europe a speculator generally can calculate beforehand, with the greatest certainty, the cost of production

Uncertain trading. of any article; but in the Philippines it is not always so easy. Independently of the uncertainty of labor, the regularity of the supply of raw material is disturbed, not only by laziness and caprice, but also by jealousy and distrust. The natives, as a rule, do not willingly see Europeans settle amongst them and engage successfully in local operations which they themselves do not understand how to execute; and in like manner the creoles are reserved with foreigners, who generally are superior to them in capital, skill, and activity. Besides jealousy, suspicion also plays a great part, and this influences the native as well against the mestizo as against the Castilian. Enough takes place to the present day to justify this feeling; but formerly, when the most thrifty subjects could buy governorships, and shamelessly fleece their provinces, such outrageous abuses are said to have been permitted until, in process of time, suspicion has become a kind of instinct amongst the Filipinos.

## XXI

The island of Leyte, between $9^{\circ} 49^{\prime}$ and $11^{\circ} 34^{\prime}$ N., Leyte and $124^{\circ} 7^{\prime}$ and $125^{\circ} 9^{\prime} \mathrm{E}$. Gr., is above twenty-five miles in length, and almost twelve miles broad, and contains one hundred seventy square miles. As I have already remarked, it is divided from Samar only by the small strait of San Juanico. The chief town, Tacloban or Taclobang, lies at the eastern entrance of this
strait, with a very good harbor and uninterrupted communication with Manila, and has consequently become the chief emporium of trade to Leyte, Biliran, and South and East Samar.*

Obliging Spanish officials.

Locusts.

The local governor likewise showed me much obliging attention; indeed, almost without exception I have, since my return, retained the most agreeable remembrances of the Spanish officials; and, therefore, if fitting opportunity occurred, I could treat of the improprieties of the Administration with greater impartiality.

In the afternoon of the day after my arrival at Tacloban, on a sudden there came a sound like the rush of a furious torrent; the air became dark, and a large cloud of locusts swept over the place. $\dagger$ I will not again recount that phenomenon, which has been so often described, and is essentially the same in all quarters of the globe, but will simply remark that the swarm, which was more than five hundred feet in width, and about fifty feet in depth, its extremity being lost in the forest, was not thought a very considerable one. It caused vigilance, but not consternation. Old and young eagerly endeavored to catch as many of the delicate creatures as they could, with cloths, nets, and flags, in order, as Dampier relates, "to roast them in an earthen pan over fire until their legs and wings drop off, and their heads and backs assume the color of boiled crabs;" after which

[^127]process he says they had a pleasant taste. In Burma at the present day, they are considered as delicacies at the royal court.*

The locusts are one of the greatest plagues of the Philippines, and sometimes destroy the harvest of entire

Plan for their extermination. provinces. The Legislación Ultramarina (iv. 604) contains a special edict respecting the extirpation of these devastating pests. As soon as they appear, the population of the invaded localities are to be drawn out in the greatest possible numbers, under the conduct of the authorities, in order to effect their destruction. The most approved means for the attainment of this object are set forth in an official document referring to the adoption of extraordinary measures in cases of public emergency; and in this the locusts are placed midway between sea-pirates and conflagrations. Of the various means that have been contrived against the destructive creatures, that, at times, appear in incredible numbers, but have been as frequently ineffectual as otherwise, only a few will be now mentioned. On April 27, 1824, the Sociedad Economica determined to import the bird, the martin (Gracula sp.), "which feeds by instinct on locusts." In the autumn of the following year the first consignment arrived from China; in 1829 a second; and in 1852 again occurs the item of $\$ 1,311$ for martins.

On the following day I proceeded with the priest of Dagami (there are roads in Leyte) from Tacloban southwards to Palos and Tanauan, two flourishing places on the east coast. Hardly half a league from the latter place, and close to the sea, a cliff of crystal lime rock rises up out of the sandy plain, which was level up to this point. It is of a greyish-green quartzose chlorite schist, from

[^128]which the enterprising Father had endeavored, with a perseverance worthy of better success, to procure lime by burning. After an ample breakfast in the convent, we proceeded in the afternoon to Dagami, and, on the next day, to Burauen.*

The country was still flat. Coco-groves and ricefields here and there interrupted the thick forest; but the country is thinly inhabited, and the people appear more cheerful, handsomer, and cleaner than those of Samar. South of Burauen rises the mountain ridge of Manacagan, on the further slope of which is a large solfatara, which yields sulphur for the powder manufactory in Manila, and for commerce. A Spanish sailor accompanied me. Where the road passed through swamp we rode on carabaos. The pace of the animals is not unpleasant, but the stretching across the broad backs of the gigantic carabaos of the Philippines is very fatiguing. A quarter of an hour beyond Burauen we crossed the Daguitan, which flows south-west to north-east, and is a hundred feet broad, its bed being full of large volcanic blozks; and, soon after, a small river in a broad bed; and, some hundred paces farther, one of a hundred and fifty feet in breadth; the two latter being arms of the Burauen. They flow from west to east, and enter the sea at Dulag. The second arm was originated only the preceding year, during a flood.

We passed the night in a hut on the northern slope of the Manacagan, which the owner, on seeing us approach, had voluntarily quitted, and with his wife and child sought other lodgings. The customs of the country require this when the accommodation does not suffice for both parties; and payment for the same is neither demanded nor, except very rarely, tendered.

[^129]About six o'clock on the following morning we started; and about half-past six climbed, by a pleasant path through the forest, to the ridge of the Manacagan, which consists of trachytic hornblende; and about seven o'clock we crossed two small rivers flowing north-west, and then, by a curve, reached the coast at Dulag. From the ridge we caught sight, towards the south, of the great white heaps of débris of the mountain Danan glimmering through the trees. About nine o'clock we came through the thickly-wooded crater of the Kasiboi, and, further south, to some sheds in which the sulphur is smelted.

The raw material obtained from the solfatara is bought in three classes: firstly, sulphur already melted to crusts; secondly, sublimated, which contains much condensed water in its interstices; and thirdly, in the clay, which is divided into the more or less rich, from which the greatest quantity is obtained. Coconut oil, which is thrown into flat iron pans holding six arrobas, is added to the sulphurous clay, in the proportion of six quarts to four arrobas, and it is melted and continually stirred. The clay which floats on the surface, now freed from the sulphur, being skimmed off, fresh sulphurous clay is thrown into the cauldron, and so on. In two or three hours six arrobas of sulphur, on an average, may be obtained in this manner from twenty-four arrobas of sulphurous clay, and, poured into wooden chests, it is moulded into blocks of about four arrobas. Half the oil employed is recovered by throwing the clay which has been saturated with it into a frame formed by two narrow bamboo hurdles, placed at a sharp angle. The oil drops into a sloping gutter of bamboo which is placed underneath, and from that flows into a pot. The price of the sulphur at Manila varies between $\$ 1.25$ and $\$ 4.50$ per picul. I saw the frames, full of clay, from which the oil exuded; but the operation itself I did
not, unfortunately, then witness, and I cannot explain in what manner the oil is added. From some experiments made on a small scale, therefore under essentially different conditions, and never with the same material, it appeared that the oil accelerates the separation of the sulphur, and retards the access of the air to the sulphur. In these experiments, the sulphur contained in the bottom of the crucible was always colored black by the separation of charcoal from the oil, and it was necessary to purify it by distillation beforehand. Of this, however, the smelters at Leyte made no mention, and they even had no apparatus for the purpose, while their sulphur was of a pure yellow color.

Hot spring.

A solfatara.

Some hundreds of paces further south, a hot spring ( $50^{\circ}$ R.),* twelve feet broad, flows from the east, depositing silicious sinter at its edges.

As we followed a ravine stretching from north to south, with sides one hundred to two hundred feet in height, the vegetation gradually ceased, the rock being of a dazzling white, or colored by sublimated sulphur. In numerous places thick clouds of vapor burst from the ground, with a strong smell of sulphurated water. At some thousand paces further, the ravine bends round to the left (east), and expands itself to the bay; and here numerous silicious springs break through the loose clay-earth, which is permeated with sulphur. This solfatara must formerly have been much more active than it is now. The ravine, which has been formed by its destruction of the rock, and is full of lofty heaps of débris, may be one thousand feet in breadth, and quite five times as long. At the east end there are a number of small, boiling quagmires, which, on forcing a stick into the matted ground, send forth water and steam.

[^130]In some deep spots further west, grey, white, red, and yellow clays have been deposited in small beds over each other, giving them the appearance of variegated marls.

To the south, right opposite to the ridge which leads to Burauen, may be seen a basin twenty-five feet broad, in a cavern in the white decomposed rock, from which a petrifying water containing silicious acid flows abundantly. The roof of the cavern is hung with stalactites, which either are covered with solid sulphur, or consist entirely of that substance.

On the upper slope of the Danan mountain, near to the summit, so much sulphur is deposited by the vapors from

Petrifying water the sulphurated water that it may be collected with coconut shells. In some crevices, which are protected against the cooling effects of the atmospheric air, it melts together in thick, brown crusts. The solfatara of Danan is situated exactly south of that below, at the end of the ravine of the Kasiboi. The clay earth, from which the silicic acid has been washed out by the rains, is carried into the valley, where it forms a plain, the greater part of which is occupied by a small lake, Ma laksan (sour), slightly impregnated with sulphuric acid. Its surface, which, by reason of the very flat banks, is protected against the weather, I found to be about five hundred paces long and one hundred broad. From the elevation of the solfatara, a rather large fresh-water lake, surrounded by wooded mountains, is seen through a gap, exactly south, which is named Jaruanan. The night was passed in a ruined shed at the south-east of the lake Malaksan; and on the following morning we climbed the south side of the mountain ridge and, skirting the solfatara of the Danan, arrived in an hour and a half at lake Jaruanan.

This lake, as well as the Malaksan, inspires the natives Jaruanan Lake. with superstitious fear on account of the suspicious
neighborhood of the solfatara, and therefore has not been profaned by either mariner, fisher, or swimmer, and was very full of fish. For the purpose of measuring its depth, I had a raft of bamboos constructed; and when my companions saw me floating safely on the lake, they all, without exception, sprang into it, and tumbled about in the water with infinite delight and loud outcries, as if they wished to indemnify themselves for their long abstinence; so that the raft was not ready before three o'clock. The soundings at the centre of the basin, which was, at the southern edge, steeper than on the north, gave thirteen brazas, or over twenty-one meters of depth; the greatest length of the lake amounted to nearly eight hundred varas (six hundred and sixtyeight meters), and the breadth to about half as much. As we returned in the evening, by torchlight, over the crest of the mountain to our night-quarters at the lake, we passed by the very modest dwelling-place of a married pair. Three branches, projecting outwards from the principal trunk of a tree, and lopped at equal points, sustained a hut of bamboos and palm-leaves of eight feet square. A hole in the floor formed the entrance, and it was divided into a chamber and ante-chamber, and four bamboo poles supported, above and below, two layers of bamboos, one of which furnished a balcony, and the other a shop in which betel was sold.
To Dulag.
The day after my return to Burauen an obliging Spanish merchant drove me through the fertile plain of volcanic sand, on which rice, maize, and sugar-cane were cultivated, to Dulag, which lies directly to the west, on the shore of the tranquil sea. The distance (according to Coello three leagues) hardly amounts to two leagues. From this place, Point Guiuan, the south point of Samar, appears like an island separated from the mainland, and further south (N. $102^{\circ} 4^{\prime}$ to $103^{\circ} 65^{\circ}$ S.) Jo-
monjol is seen, the first island of the Archipelago sighted by Magellan on April 16, 1521. At Dulag, my former companion joined us in order to accompany us on the journey to the Bito Lake. The arrangement of transportation and of provisions, and, still more, the due consideration of all the propositions of three individuals, each of whose claims were entitled to equal respect, occupied much time and required some address. We at length sailed in a large casco (barge) southwards along the coast to the mouth of the river Mayo, which, according to the map and the information there given, is said to come from the Bito Lake. We proceeded upwards in a boat, but were informed at the first hut that the lake could be reached only by making a long circuit through swampy forest; when most of our party proposed to return. Various reasons besides the want of unanimity in the conduct of our adventure, which had proceeded thus far, delayed our arrival at Abuyos until eleven o'clock at night. In the first place, on our way, we had to cross a small branch of the Mayo, and after that the Bito River. The distance of the latter from Abuyog (extravagantly set down on Coello's map) amounts to fourteen hundred brazas, according to the measurement of the gobernadorcillo, which is probably correct.*

The following day, as it rained heavily, was employed in making inquiries respecting the road to the Bito Lake.

An unpromising road. We received very varied statements as to the distance, but all agreed in painting the road thither in a discouraging light. A troublesome journey of at least ten hours appeared to us to be what most probably awaited us.

On the morrow, through a pleasant forest road, we Bito Lake. reached in an hour the Bito River, and proceeded in boats, which we met there, up the river between flat

[^131]sandy banks covered with tall cane and reeds. In about ten minutes, some trees fallen right across the stream compelled us to make a circuit on land, which in half an hour brought us again to the river, above the obstacles. Here we constructed rafts of bamboo, upon which, immersed to the depth of half a foot, the material being very loosely adjusted, we reached the lake in ten minutes. We found it covered with green confervae; a double border of pistia and broad-leaved reed grasses, six to seven feet high, enclosing it all round. On the south and west some low hillocks rose up, while from the middle it appeared to be almost circular, with a girdle of forest. Coello makes the lake much too large (four instead of one square mile), and its distance from Abuyog can be only a little over a league. With the assistance of a cord of lianas tied together, and rods placed in a line, we found its breadth five hundred and eighty-five brazas or nine hundred and seventy-seven meters, (in the broadest part it might be a little over one thousand meters); and the length, as computed from some imperfect observations, one thousand and seven brazas (sixteen hundred and eighty meters), consequently less than one square mile. Soundings showed a gently inclined basin, eight brazas, or over thirteen meters, deep in the middle. I would gladly have determined the proportions with more accuracy; but want of time, the inaccessibility of the edge of the bank, and the miserable condition of our raft, allowed of only a few rough measurements.
A forest home.
Not a trace of human habitations was observable on the shore; but a quarter of an hour's distance from the northern edge we found a comfortable hut, surrounded by deep mud and prickly calamus, the tenants of which, however, were living in plenty, and with greater conveniences than many dwellers in the villages. We were
very well received and had fish in abundance, as well as tomatoes, and capsicum to season them with, and dishes of English earthenware out of which to eat them.

The abundance of wild swine had led the settlers to Snaring swine. invent a peculiar contrivance, by which they are apprised of their approach even when asleep, and guided to their trail in the darkness. A rope made of strips of banana tied together, and upwards of a thousand feet in length, is extended along the ground, one end of which is attached to a coconut shell, full of water, which is suspended immediately over the sleepingplace of the hunter. When a pig comes in contact with the rope, the water is overturned by the jerk upon the sleeper, who, seizing the rope in his hand, is thereby conducted to his prey. The principal employment of our hosts appeared to be fishing, which is so productive that the roughest apparatus is sufficient. There was not a single boat, but only loosely-bound rafts of bamboo, on which the fishers, sinking, as we ourselves did on our raft, half a foot deep, moved about amongst the crocodiles, which I never beheld in such numbers and of so large a size as in this lake. Some swam about on the surface with their backs projecting out of the water. It was striking to see the complete indifference with which even two little girls waded in the water in the face of the great monsters. Fortunately the latter appeared to be satisfied with their ample rations of fish. Four kinds of fish are said to be found in the lake, amongst them an eel; but we got only one.*

Early on the following morning our native attendants $A$ secret still. were already intoxicated. This led to the discovery of another occupation of the settlers, which I do not hesitate to disclose now that the Government monopoly

[^132]Tobacco prohibition.
has been abolished. They secretly distilled palm-brandy and carried on a considerable trade in it; and this also explained to me why the horrors of the road to the Mayo River and ta Abuyog had been painted in such warm colors.* We returned on our rafts to the place where we had found them, a distance of about fifteen hundred feet; and onwards, through wild cane with large clusters of flowers (Saccharum sp.), sixteen feet high, east by north, we got to our boats, and then to the bar, whence, after a march of an hour and a half, we reached Abuyog. From Abuyog we returned by water to Dulag, and by land to Burauen, where we arrived at night, sooner than our hostlers had expected, for we caught them sleeping in our beds.
Not long ago much tobacco was cultivated in this country, and was allowed to be sold to the peasantry under certain conditions; but recently it was forbidden to be sold, except by the Government, who themselves determined its value at so very low a rate that the culture of tobacco has almost entirely ceased. As the tobacco company, however, had already erected stores and appointed collectors, the knowing ones rightly foresaw that these steps would be followed by compulsory labor, even as it occurred in other places. The east coast of Leyte is said to be rising while the west is being destroyed by the sea, and at Ormog the sea is said to have advanced about fifty ells $\dagger$ in six years.

[^133]
## XXII

The Bisayans-at least the inhabitants of the Islands of The Bisayans Samar and Leyte (I have not become closely acquainted with any others)-belong to one race.* They are, physically and intellectually, in character, dress, manners and customs, so similar that my notes, which were originally made at different points of the two Islands, have, after removal of the numerous repetitions, fused into one, which affords a more complete picture, and affords, at the same time, opportunity for the small differences, where they do occur, to stand out more conspicuously.

There are no Negritos either in Samar or Leyte, but Cimarronese, who pay no tribute, and who do not live in villages, but independently in the forests. Unfortunately I have had no personal intercourse with them, and what I have learned respecting them from the Christian inhabitants of Samar is too uncertain to be repeated. But it does seem certain that all these Ci marronese or their ancestors have traded with the Spaniards, and that their religion has appropriated many Catholic forms. Thus, when planting rice, and, according to ancient practices, setting apart some of the seed to be offered in the four corners of the field as sacrifice, they are accustomed to repeat some mutilated Catholic

[^134]prayers, which they appear to consider as efficacious as their old heathenish ones. Some have their children baptized as well, as it costs nothing; but, save in these respects, they perform no other Christian or civil obligations. They are very peaceable, neither making war with one another, nor having poisoned arrows. Instances of Cimarronese, who go over to Christianity and village life, together with tribute and servitude, are very rare; and the number of the civilized, who return to the forests in order to become Cimarronese, is, on the other hand, very inconsiderable indeed-still smaller than in Luzon, as the natives, from the dull, almost vegetating life which they lead, are not easily brought into such straitened circumstances as to be compelled to leave their village, which, still more than in Luzon, is all the world to them.
Rice-farming.
The culture of rice follows the seasons of the year. In some places where there are large fields the plough (arado) and the sod-sod (here called surod) are employed; but, almost universally, the rice-field is only trodden over by carabaos in the rainy season. Sowing is done on the west coast in May and June, planting in July and August, and reaping from November to January. One ganta of seed-corn gives two, sometimes from three to four, cabanes (i.e., fifty, seventy-five, and a hundred fold). In the chief town, Catbalogan, there are but very few irrigated fields (tubigan, from tubig, water), the produce of which does not suffice for the requirements, and the deficiency is made up from other places on the coasts of the Island. On the other hand, Catbalogan produces abaca, coco-nut oil, wax, balate (edible holothuria, sea cucumber), dried fish, and woven stuffs. On the north and east coasts sowing takes place from November to January, and reaping six months later. During the remaining six months the field serves as
pasture for the cattle; but in many places rice culture goes on even during these months, but on other fields. A large portion of this rice is frequently lost on account of the bad weather.

Purchases of land are seldom made, it being generally acquired by cultivation, by inheritance, or forfeiture. In Catbalogan the best rice land was paid for at the rate of one dollar for a ganta of seed-corn, and, on the north coast of Lauang, a field producing yearly one hundred cabanes was purchased for thirty dollars. Reckoning, as in Naga, one ganta of seed-corn at four loanes, and seventy-five cabanes of produce at one quiñon, the eastern rice land costs, in the first instance, three thalers and a third, in the second three thalers. The owner lets the bare property out on leases, and receives one-half the harvest as rent.* The cultivation of rice in Leyte is conducted as in Samar, but it has given way to the cultivation of abaca; the governors, while they were allowed to trade, compelled the natives to devote a part of their fields and of their labor to it. Should a peasant be in arrears, it is the prevalent custom in the country for him to pay to the dealer double the balance remaining due at the next harvest.
Mountain-rice culture, which in Catbalogan is almost Mountain rice. the only cultivation, requires no other implement of agriculture than the bolo to loosen the soil somewhat, and a sharp stick for making holes at distances of six inches for the reception of five or six grains of rice. Sowing is done from May to June, weeding twice, and five months later it is cut stalk by stalk; the reaper receiving half a real daily wages and food. The produce is between two and three cabanes per ganta, or fifty

[^135]to seventy fold. The land costs nothing, and wages amount to nearly five reals per ganta of seed-corn. After a good harvest the caban fetches four reales; but just before the harvest the price rises to one dollar, and often much higher. The ground is used only once for dry rice; camote (batata), abacá, and caladium being planted on it after the harvest. Mountain rice is more remunerative than watered rice about in the proportion of nine to eight.
Other products.
Next to rice the principal articles of sustenance are camote (convolvulus batatas), ubi (dioscorea), gabi (caladium), palauan (a large arum, with taper leaves and spotted stalk). Camote can be planted all the year around, and ripens in four months; but it takes place generally when the rice culture is over, when little labor is available. When the cultivation of camote is retained, the old plants are allowed to multiply their runners, and only the tubers are taken out of the ground. But larger produce is obtained by cleaning out the ground and planting anew. From eighteen to fifteen gantas may be had for half a real.
Abacá.

Tobacco.

Balao oil.
Although there are large plantations of abacá, during my visit it was but little cultivated, the price not being sufficiently remunerative.

Tobacco also is cultivated. Formerly it might be sold in the country, but now it has to be delivered to the government.

A resinous oil (balao or malapajo) is found in Samar and Albay, probably also in other provinces. It is obtained from a dipterocarpus (apiton), one of the loftiest trees of the forest, by cutting in the trunk a wide hole, half a foot deep, hollowed out into the form of a basin, and from time to time lighting a fire in it, so as to free the channels, through which it flows, of obstructions. The oil thus is collected daily and comes
into commerce without any further preparation. Its chief application is in the preservation of iron in shipbuilding. Nails dipped in the oil of the balao, before being driven in, will, as I have been assured by credible individuals, defy the action of rust for ten years; but it is principally used as a varnish for ships, which are painted with it both within and without, and it also protects wood against termites and other insects. The balao is sold in Albay at four reals for the tinaja of ten gantas (the liter at eight pence). A cement formed by the mixture of burnt lime, gum elemi, and coconut oil, in such proportions as to form a thick paste before application, is used for the protection of the bottoms of ships; and the coating is said to last a year.* Wax wax. is bartered by the Cimarronese. The whole of Samar annually yields from two hundred to three hundred piculs, whose value ranges between twenty-five and fifty dollars per picul, while in Manila the price is generally five to ten dollars higher; but it fluctuates very much, as the same product is brought from many other localities and at very irregular intervals of time.

There is hardly any breeding of cattle, notwithstanding the luxuriant growth of grasses and the absence

Scarcity of stock. of destructive animals. Horses and carabao are very rare, and are said to have been introduced late, not before the present century. As in Samar there are hardly any other country roads than the seashore and the shallow beds of rivers (it is better in the north of Leyte), the carabao is used only once every year in treading over the earth of the rice-field. During the year he roams at large on the pastures, in the forest, or on a small island, where such exists, in the neighbor-

[^136]hood. Some times in the year one may see several carabaos, attached to the large trunk of a tree, dragging it to the village. Their number, consequently, is extremely small. Carabaos which tread the rice land well are worth as much as ten dollars. The mean price is three dollars for a carabao, and five to six dollars for a caraballa. Horned cattle are only occasionally used as victims at festivals. The property of several owners, they are very limited in number, and live half-wild in the mountains. There is hardly any trade in them, but the average price is three dollars for a heifer, and five or six dollars for a cow. Almost every family possesses a pig; some, three or four of them. A fat pig costs six or seven dollars, even more than a cow. Many Filipino tribes abstain strictly from beef; but pork is essential to their feasts. Grease, too, is so dear that from three to four dollars would, under favorable circumstances, be got on that account for a fat animal. Sheep and goats thrive well, and propagate easily, but also exist only in small numbers, and are hardly utilized either for their wool or their flesh. Creoles and mestizos are for the most part too idle even to keep sheep, preferring daily to eat chicken. The sheep of Shanghai, imported by the governor of Tacloban, also thrive and
Poultry. propagate famously. A laying hen costs half a real, a rooster the same, and a game cock as much as three dollars, often considerably more. Six or eight hens, or thirty eggs, may be bought for one real.
Cost of food.
A family consisting of father, mother, and five children requires daily nearly twenty-four chupas of palay (rice in the husk), which, after winnowing, comes to about twelve chupas. This at the average price of four reals per cavan costs about half a real. The price, however, varies. Sometimes, after the harvest, it is three reals per cavan; before it, ten; and in Albay, even about
thirty reals. Then about three cuartos are wanted for extras (as fish, crabs, vegetables, etc.), which, however, are generally collected by the children; and, lastly, for oil two cuartos, buyo one cuarto, tobacco three cuartos (three leaves for one cuarto), the latter being smoked, not chewed. A woman consumes half as much buyo and tobacco as a man. Buyo and tobacco are less used in Leyte than in Samar.

For clothing a man requires yearly-four rough Clothino cost. shirts of guinara, costing from one to two reals; three or four pairs of trousers, at one to two and a half reals; two kerchiefs for the head, at one and a half real (hats are not worn on the south and west coasts), and for the church festivals generally one pair of shoes, seven reals; one fine shirt, a dollar or more; and fine pantaloons, at four reals. A woman requires-four to six camisas of guinara, at one real; two to three sayas of guinara, at three to four reals, and one or two sayas of European printed cotton, at five reals; two head-kerchiefs at one and a half to two reals; and one or two pairs of slippers (chinelas) to go to mass in, at two reals and upwards.

The women genrally have, besides, a fine camisa costWomen's extras. ing at least six reals; a mantilla for churchgoing, six reals (it lasts four years); and a comb, two cuartos. Many also have under skirts (nabuas), two pieces at four reals, and earrings of brass and a rosary, which last articles are purchased once for all. In the poorer localities, Lauang for instance, only the home-woven guinaras are worn; and there a man requires-three shirts and three pairs of trousers, which are cut out of three pieces of guinara, at two reals, and a salacot (hat), generally home made, worth half a real; while a woman uses yearly-four sayas, value six reals; and a camisa,
with a finer one for the festivals, eight reals. Underskirts are not worn; and the clothing of the children may be estimated at about half of the above rates.

Household furniture.

Wages.

For household furniture a family has a cooking pot* of unglazed burnt clay, imported by ships from Manila, the cost of which is fixed by the value of its contents in rice; a supply of bamboo-canes; seven plates, costing between two and five cuartos; a carahai (iron pan), three to four reals; coconut shells serving for glasses; a few small pots, altogether half a real; a sundang, four to six reals, or a bolo (large forest knife), one dollar; and a pair of scissors (for the women), two reals. The loom, which every household constructs for itself of bamboo of course costs nothing.

The rate of daily wages, in the case of Filipino employers, is half a real, without food; but Europeans always have to give one real and food, unless, by favor of the gobernadorcillo, they get polistas at the former rate, which then regularly goes into the public coffers. An ordinary carpenter earns from one to two reals; a skilful man, three reals daily. The hours of work are from six to noon, and from two to six in the evening.

## Industries.

Almost every village has a rude smith, who understands the making of sundangs and bolos; but the iron and the coal required for the purpose mut be supplied with the order. No other work in metal is executed. With the exception of a little ship-building, hardly any other pursuit than weaving is carried on; the loom is rarely wanting in a household. Guinara, i. e., stuff made of the abacá, is manufactured, as well as also some piña, or figured silk stuffs, the silk being brought from Manila, and of Chinese origin. All these fabrics are made in private homes; there are no factories.

[^137]In places where rice is scarce the lower class of people Barter. catch fish, salt and dry them, and barter them for rice. In the chief towns purchases are made with the current money; but, in the interior, where there is hardly any money, fabrics and dried fish are the most usual means of exchange. Salt is obtained by evaporating the seawater in small iron hand-pans (carahais), without previous evaporation in the sun. The navigation between Catbalogan and Manila continues from December to July, and in the interval between those months the ships lie dismantled under sheds. There also is communication by the coast eastwards to Guian, northwards to

Communication. Catarman, and sometimes to Lauang. The crews consist partly of natives, and partly of foreigners, as the natives take to the sea with great reluctance; indeed, almost only when compelled to leave their villages. Samar has scarcely any other means of communication besides the navigation of the coast and rivers, the interior being roadless; and burdens have to be conveyed on the shoulders. An able-bodied porter, who receives a real and a half without food, will carry three arrobas (seventyfive pounds at most) six leagues in a day, but he cannot accomplish the same work on the following day, requiring at least one day's rest. A strong man will carry an arroba and a half daily for a distance of six leagues for a whole week.

There are no markets in Samar and Leyte; so that No markets. whoever wishes to buy seeks what he requires in the houses, and in like manner the seller offers his goods.

A Filipino seeking to borrow money has to give ample Debts. security and pay interest at the rate of one real for every dollar per month (twelve and one-half per cent. monthly); and it is not easy for him to borrow more than five dollars, for which sum only he is legally liable. Trade and credit are less developed in eastern and northern Samar than
in the western part of the island, which keeps up a more active communication with the other inhabitants of the Archipelago. There current money is rarely lent, but only its value in goods is advanced at the rate of a real per dollar per mensem. If the debtor fails to pay within the time appointed, he frequently has to part with one of his children, who is obliged to serve the lender for his bare food, without wages, until the debt has been extinguished. I saw a young man who had so served for the term of five years, in liquidation of a debt of five dollars which his father, who had formerly been a gobernadorcillo in Paranas, owed to a mestizo in Catbalogan; and on the east coast a pretty young girl, who, for a debt of three dollars due by her father, had then, for two years, served a native, who had the reputation of being a spendthrift. I was shown in Borongan a coconut plantation of three hundred trees, which was pledged for a debt of ten dollars about twenty years ago, since which period it had been used by the creditor as his own property; and it was only a few years since that, upon the death of the debtor, his children succeeded, with great difficulty, in paying the original debt and redeeming the property. It is no uncommon thing for a native to borrow two dollars and a half from another in order to purchase his exemption from the forty days of annual service, and then, failing to repay the loan punctually, to serve his creditor for a whole year.*

People of Samar
The inhabitants of Samar and Leyte, who are at once idler and filthier than those of Luzon, seem to be as much behind the Bicols as the latter are behind the Tagalogs.

[^138]In Tacloban, where a more active intercourse with Manila exists, these qualities are less pronounced, and the women, who are agreeable, bathe frequently. For the rest, the inhabitants of the two islands are friendly, obliging, tractable, and peaceable. Abusive language or violence very rarely occurs, and, in case of injury, information is laid against the offender at the tribunal. Great purity of manners seems to prevail on the north and west coasts, but not on the east coast, nor in Leyte. External piety is universally conspicuous, through the training imparted by the priests; the families are very united, and great influence is wielded by the women, who are principally engaged in household employments, and are tolerably skilful in weaving, and to whom only the lighter labors of the field are assigned. The authority of the parents and of the eldest brother is supreme, the younger sisters never venturing to oppose it; women and children are kindly treated.

The natives of Leyte, clinging as strongly to their Leyte. native soil as those of Samar, like them, have no partiality for the sea, though their antipathy to it is not quite so manifest as that of the inhabitants of Samar.*

There are no benevolent institutions in either of the two islands. Each family maintains its own poor and crippled, and treats them tenderly. In Catbalogan, the chief town of the island, with five to six thousand inhabitants, there were only eight recipients of charity; but in Albay mendicants are not wanting. In Lauang, when a Spaniard, on a solemn festival, had caused it to be proclaimed that he would distribute rice to the poor, not a single applicant came forward. The honesty

[^139]of the inhabitants of Samar is much commended. Obligations are said to be contracted almost always without written documents, and never forsworn, even if they make default in payment. Robberies are of rare occurrence in Samar, and thefts almost unknown. There are schools also here in the pueblos, which accomplish quite as much as they do in Camarines.

Amusements.

Suitor's service.

Of the public amusements cock-fighting is the chief, but it is not so eagerly pursued as in Luzon. At the church festivals they perform a drama translated from the Spanish, generally of a religious character; and the expense of the entertainment is defrayed by voluntary contributions of the wealthy. The chief vices of the population are play and drunkenness; in which latter even women and young girls occasionally indulge. The marriage feasts, combining song and dance, often continue for several days and nights together, where they have a sufficient supply of food and drink. The suitor has to serve in the house of the bride's parents two, three, and even five years, before he takes his bride home; and money cannot purchase exemption from this onerous restriction. He boards in the house of the bride's parents who furnish the rice, but he has to. supply the vegetables himself.* At the expiration of his term of service he builds, with the assistance of his relations and friends, the house for the family which is about to be newly established.

Morals.
Though adultery is not unknown, jealousy is rare, and never leads to violence. The injured individual generally goes with the culprit to the minister, who,

[^140]with a severe lecture to one, and words of consolation to the other, sets everything straight again. Married women are more easily accessible than girls, whose prospect of marriage, however, it seems is not greatly diminished by a false step during single life. While under parental authority girls, as a rule, are kept under rigid control, doubtless in order to prolong the time of servitude of the suitor. External appearance is more strictly regarded among the Bisayans than by the Bicols and Tagalogs. Here also the erroneous opinion prevails, that the number of the women exceeds that of the men. Instances occur of girls of twelve being mothers; but they are rare; and though women bear twelve or thirteen children, many of these, however, do not live. So much so is this the case, that families of more than six

Great infant mortality. or eight children are very rarely met with.

Superstition is rife. Besides the little church images Superstitions. of the Virgin, which every Filipina wears by a string round the neck, many also have heathen amulets, of which I had an opportunity of examining one that had been taken from a very daring criminal. It consisted of a small ounce flask, stuffed full of vegetable root fibres, which appeared to have been fried in oil. This flask, which is prepared by the heathen tribes, is accredited with the virtue of making its owner strong and courageous. The capture of this individual was very difficult; but, as soon as the little flask was taken from him, he gave up all resistance, and allowed himself to be bound. In almost every large village there are one or more Asuang families who are generally dreaded and avoided, Ghouls. and regarded as outlaws, and who can marry only amongst themselves. They have the reputation of being cannibals.* Perhaps they are descended from such tribes? At any rate, the belief is very general and firmly

[^141]Ancient literature.

Festivals and shrines.

A ncestor worship.
rooted; and intelligent old natives when questioned by me on the subject, answered that they certainly did not believe that the Asuangs ate men at the present time, but that their forefathers had assuredly done so.*

Of ancient legends, traditions, or ballads, it is stated that there are none. It is true they have songs at their dances, but these are spiritless improvisations, and mostly in a high key. They have not preserved any memorials of former civilization. "The ancient Pintados possessed no temples, every one performing his anitos in his own house, without any special solemnity"-(Morga, f. 145 v). Pigafetta (p. 92) certainly mentions that the King of Cebu, after his conversion to Christianity, caused many temples built on the seashore to be destroyed; but these might only have been structures of a very perishable kind. On certain occasions the Bisayans celebrated a great festival, called Pandot, at which they worshipped their gods in huts, which were expressly built for the purpose, covered with foliage, and adorned with flowers and lamps. They called these huts simba or simbahan (the churches are so called to the present day), "and this is the only thing which they have similar to a church or a temple"-(Informe, I., i., 17). According to Gemelli Careri they prayed to some particular gods, derived from their forefathers, who are called by the Bisayans Davata (Divata), and by the Tagalogs Anito; one anito being for the sea and another for the house, to watch over the children. $\dagger$ In the number of these anitos they placed their grandfathers and great-grandfathers, whom they invoked in all their necessities, and

[^142]in whose honor they preserved little statues of stone, wood, gold, and ivory, which they called liche or laravan. Amongst their gods they also reckoned all who perished by the sword, or were killed by lightning, or devoured by crocodiles, believing that their souls ascended to heaven on a bow which they called balangas. Pigafetta thus describes the idols which were seen by him:-"They are of wood, and concave, or hollow, without any hind quarters, with their arms extended, and their legs and feet bent upwards. They have very large faces, with four powerful teeth like boars' tusks, and are painted all over."*

In conclusion, let me take a brief account of the religion of the ancient Bisayans from Fr. Gaspar San Agustin (Conquest, 169):

The dæmon, or genius, to whom they sacrificed was called by them Divata, which appears to denote an antithesis to the Deity, and a rebel against him. Hell was called Solad, and Heaven (in the language of the educated people) Ologan *** The souls of the departed go to a mountain in the province of Oton $\dagger$, called Medias, where they are well entertained and served. The creation of the universe is thus explained. A vulture hovering between heaven and earth finds no place to settle himself upon, and the water rises towards heaven; whereupon Heaven, in its wrath, creates islands. The vulture splits a bamboo, out of which spring man and woman, who beget many children, and, when their number becomes too great, drive them out with blows.

[^143]Some conceal themselves in the chamber, and these become the Datos; others in the kitchen, and these become the slaves. The rest go down the stairs and become the people.

## XXIII

Ports of entry.

Old Zamboanga fort.

Exports.

In $\cdot 1830$ seven new ports were opened as an experiment, but, owing to great frauds in the charges, were soon afterwards closed again. In 1831 a custom-house was established at Zamboanga, on the south-west point of Mindanao; and in 1855 Sual, in the Gulf of Lingayen, one of the safest harbors on the west coast of Luzon, and Iloilo in Panay, were thrown open; and in 1863 Cebu, on the island of the same name, for the direct communication with foreign countries.

Before 1635 the Spaniards had established a fort at Zamboanga, which, although it certainly could not wholly prevent the piratical excursions against the colonies, yet considerably diminished them.* Until 1848 from eight hundred to fifteen hundred individuals are stated to have been carried off yearly by the Moros. $\dagger$ The establishment of this custom-house has, therefore, been based upon political rather than commercial motives, it being found desirable to open an easily accessible place to the piratical states of the Sulu Sea for the disposal of their products. Trade, up to the present date, is but of very inconsiderable amount, the exports consisting chiefly of a little coffee (in 1871 nearly six thousand piculs), which, from bad management, is worth thirty per cent. less than Manila coffee, and of the collected products of the forest and of the water, such as wax, birds'-nests, tortoise-shell, pearls, mother-of-pearl, and edible holothuria. This trade,

[^144]as well as that with Sulu, is entirely in the hands of the Chinese, who alone possess the patience, adaptiveness, and adroitness which are required for the purpose.

Sual is specially important for its exports of rice; and its foreign trade is therefore affected by the results trade. of the harvests in Saigon, Burma, and China. In 1868, when the harvests in those countries turned out good, Sual carried on only a coasting trade.

Cebu (with a population of 34,000 ) is the chief town Cebu. of the island of the same name, the seat of Government and of the bishop of the Bisayas, and within fortyeight hours from Manila by steamer. It is as favorably situated with regard to the eatern portion of the Bisayan group as Iloilo is for the western, and is acquiring increased importance as the emporium for its products. Sugar and tobacco are obtained from Bohol; rice from Panay; abacá from Leyte and Mindanao; and coffee, wax, Spanish cane, and mother-of-pearl from Misamis (Mindanao). Its distance from Samar is twenty-six, from Leyte two and a half, from Bohol four, and from Negros eighteen miles.

The island of Cebu extends over seventy-five square Cebu island. miles. A lofty mountain range traverses it from north to south, dividing the east from the west side, and its population is estimated at $340,000,-4,533$ to the square mile. The inhabitants are peaceable and docile; thefts occur very seldom, and robberies never. Their occupations are agriculture, fishing, and weaving for home consumption. Cebu produces sugar, tobacco, maize, rice, etc., and in the mountains potatoes; but the rice produced does not suffice for their requirements, there being only a little level land, and the deficiency is imported from Panay.

The island possesses considerable beds of coal, the Land tenure. full yield of which may now be looked for, as the duty
on export was abandoned by a decree of the 5th of May, 1869.* While in Luzon and Panay the land is for the most part the property of the peasantry, in Cebu it mostly belongs to the mestizos, and is let out by them, in very small allotments, upon lease. The owners of the soil know how. to keep the peasants in a state of dependence by usurious loans; and one of the results of this abuse is that agriculture in this island stands lower than in almost any other part of the archipelago. $\dagger$

Customhouse data. The entire value of the exports in 1868 amounted to $\$ 1,181,050$; of which sugar to the value of $\$ 481,127$, and abacá to the value of $\$ 378,256$; went to England, abacá amounting to $\$ 112,000$ to America, and tobacco to $\$ 118,260$ to Spain. The imports of foreign goods, mostly by the Chinese, come through Manila, where they purchase from the foreign import houses. The value of these imports amounted in 1868 to $\$ 182,522$; of which $\$ 150,000$ were for English cotton stuffs. The entire imports of the island were estimated at $\$ 1,243,582$, and the exports at $\$ 226,898$. Among the importations were twenty chests of images, a sign of the deeplyrooted worship of the Virgin. Formerly the products for exportation were bought up by the foreign merchants, mostly Chinese mestizos; but now they are bought

[^145]direct from the producers, who thus obtain better prices in consequence of the abolition of the high brokerages. To this and to the energy of the foreign merchants, under favorable circumstances, is the gradual improvement of agriculture principally to be ascribed.

Iloilo is the most important of the newly opened Iloilo. ports, being the central point of the Bisayan group, and situated in one of the most thickly populated and industrious provinces. Nicholas Loney* estimates the export of goods woven from the fiber of the piña, from Iloilo, and the neighboring provinces, at about one million dollars annually. The harbor is excellent, being completely protected by an island which lies immediately before it; and at high tide there is about twelve feet of water close in shore for vessels to lie in. On account of the bar, however, ships of a deeper draught than this are obliged to complete their loading outside. Previous to the opening of the new harbors, all the provinces were compelled as well to bring their products intended for exportation to Manila, as to receive from the same place their foreign imports; the cost of which therefore was greatly increased through the extra expenses incurred by the double voyage, reloading, brokerage, and wharfage charges. According to a written account by N . Loney, it is shown how profitable, even after a few years, the opening of Iloilo has been to the provinces immediately adjoining-the islands of Panay and Negros.

The higher prices which can be obtained for directly sugar. exported sugar, combined with the facility and security of the trade as contrasted with the late monopoly enjoyed by Manila, have occasioned a great extension of the cultivation of that article. Not only in Iloilo, but also in Antique and Negros, many new plantations have

[^146]arisen, and the old ones have been enlarged as much as possible; and not less important has been the progress in the manufacture. In 1857 there was not one iron mill to be found on the island; so that, in working with the wooden mill, about thirty per cent. of the sap remained in the cane, even after it had thrice passed through. The old wooden presses, which were worked by steam or carabaos, have now been supplanted by new ones; and these the native planters have no difficulty in obtaining, as they can get them on credit from the warehouses of the English importers. Instead of the old Chinese cast-iron pans which were in use, far superior articles have been imported from Europe; and many large factories worked by steam-power and with all modern improvements have been established. In agriculture, likewise, creditable progress is noticeable. Improved ploughs, carts, and farming implements generally, are to be had in plenty. These changes naturally show how important it was to establish at different points, extending over two hundred miles of the Archipelago, commercial centers, where it was desirable that foreigners should settle. Without these latter, and the facilities afforded to credit which thereby ensued, the sudden rise and prosperity of Iloilo would not have been possible, inasmuch as the mercantile houses in that capital would have been debarred from trading with unknown planters in distant provinces, otherwise than for ready money. A large number of half-castes, too, who before traded in manufactured goods purchased in Manila, were enabled after this to send their goods direct to the provinces, to the foreign firms settled there; and as, ultimately, neither these latter nor the Chinese retail dealers could successfully compete with them, the result has been that, as much to their own profit as to that of the country, they have betaken themselves to
the cultivation of sugar. In this manner important plantations have been established in Negros, which are managed by natives of Iloilo: but there is a scarcity of laborers on the island.

Foreigners now can legally acquire property, and Land disputes. possess a marketable title; in which respect the law, until a very recent period, was of an extremely uncertain nature. Land is to be obtained by purchase, or, when not already taken up, by "denuncia" (i.e. priority of claim). In such case, the would-be possessor of the land must enter into an undertaking in the nearest of the native Courts to cultivate and keep the said land in a fit and serviceable condition. Should no other claim be put in, notice is thereupon given of the grant, and the magistrate or alcalde concludes the compact without other cost than the usual stamp duty.

Many mestizos and natives, not having the necessary capital to carry on a large plantation successfully, sell the fields which they have already partially cultivated to European capitalists, who are thus relieved of all the preliminary tedious work. Evidently the Colonial Government is now sincerely disposed to favor the laying out of large plantations.

The want of good roads is particularly felt: but, with

Lack of capital for large plantations. the increase of agriculture, this defect will naturally be remedied; and, moreover, most of the sugar factories are situated on rivers which are unnavigable even by flat freight boats. The value of land in many parts of the country has doubled within the last ten years.*

Up to 1854 the picul of sugar was worth in Iloilo Sugar prices. from $\$ 1.05$ to $\$ 1.25$ and seldom over $\$ 2.00$ in Manila;

[^147]in 1866, $\$ 3.25$; and in 1868, $\$ 4.75$ to $\$ 5.00$ in Iloilo. The business in Iloilo therefore shows an increase of \$1.75 per picul.*
Negros. At the end of 1866 there were as many as twenty Europeans established on the island of Negros as sugar planters, besides a number of mestizos. Some of them were working with steam machinery and vacuum pans. The general rate of pay is from $\$ 2.05$ to $\$ 3.00$ per month. On some plantations the principle of acsa, i.e. part share, is in operation. The owner lets out a piece of ground, providing draught cattle and all necessary ploughing implements, to a native, who works it, and supplies the mill with the cut cane, receiving as payment a share, generally a third, of the product. In Negros the violet cane is cultivated, and in Manila the white (Otaheiti). The land does not require manuring. On new ground, or what we may term virgin soil, the cane often grows to a height of thirteen feet. A vast improvement is to be observed in the mode of dress of the people. Piña and silk stuffs are beoming quite common. Advance in luxury is always a favorable sign; according to the increase of requirements, industry flourishes in proportion.

The future sugar market.

As I have already mentioned, California, Japan, China, and Australia appear designed by nature to be the principal consumers of the products of the Philippine Islands. Certainly at present England is the best customer; but nearly half the account is for sugar, in consequence of their own custom duties. Sometimes it happens that not more than one-fourth of the sugar crop is sufficiently refined to compete in the Australian and Californian markets with the sorts from Bengal, Java,

[^148]and the Mauritius; the remaining three-fourths, if particularly white, must perforce undertake the long voyage to England, despite the high freight and certain loss on the voyage of from ten to twelve per cent. through the leakage of the molasses. The inferior quality of the Philippine sugar is at once perceived by the English refiners, and is only taxed at $8 s$. per cwt., while purer sorts pay 10 s. to 12 s .*

In this manner the English customs favor the inferior qualities of manufactured sugar. The colonial Govern-

A valuable by. product. ment did not allow those engaged in the manufacture of sugar to distil rum from the molasses until the year 1862. They had, therefore, little inducement to extract, at a certain expense, a substance the value on which they were not permitted to realize; but under ordinary circumstances the distillation of the rum not only covered the cost of refining, but gave, in addition, a fair margin of profit.

## XXIV

One of the most interesting productions of the island manila hemp. is Manila hemp. The French, who, however, hardly use it, call it "Silk-Plant," because of its silky appearance.

The natives call the fiber bandala, and in commerce (generally speaking) abacá, just as the plant from which it is obtained.

The latter is a wild species of banana growing in the abacci. Philippine Islands, known also as Arbol de Cañamo (hemp-tree), Musa textilis, Lin. It does not differ in

[^149]appearance to any great extent from the edible banana (Musa paradisiaca), one of the most important plants of the torrid zone, and familiar to us as being one of our most beautiful hot-house favorites.

Undetermined plant relations.

Whether this and the "musæ" (M. troglodytarum, M. sylvestris, and others), frequently known, too, as $M$. textilis, are of the same species, has not yet been determined. The species Musaceæ are herbaceous plants only. The outer stem consists of crescent-shaped petioles crossing one another alternately, and encircling the thin main stem. These petioles contain a quantity of bast fiber, which is used as string, but otherwise is of no commercial value. The serviceable hemp fiber has, up to the present time, been exclusively obtained from the southern portion of the Philippines.

The southern Camarines and Albay are favorably adapted for the cultivation of this plant, as are also the islands of Samar and Leyte, and the adjacent islands; and Cebu likewise, although a portion of the so-called "Cebu hemp" comes from Mindanao. In Negros the bast-banana thrives only in the south, not in the north; and Iloilo, which produces most of the hemp cloth (guinara), is obliged to import the raw material from the eastern district, as it does not flourish in the island of Panay. In Capiz, it is true, some abacá may be noticed growing, but it is of trifling value. Hitherto all attempts, strenuous though the efforts were, to acclimatize the growth of hemp in the western and northern provinces have failed. The plants rarely grow as high as two feet, and the trouble and expense are simply unremunerative. This failure may be accounted for by the extreme dryness prevailing during many months of the year, whereas in the eastern provinces plentiful showers fall the whole year round.

The great profit which the Manila hemp has yielded in the few years since its production, however, has given encouragement to still further experiments; so that, indeed, it will shortly be shown whether the cultivation of abacá is to be confined to its present limited area, while the edible species of banana has spread itself over the whole surface of the earth within the tropics. On the volcanic mountains of Western Java a species of the Musaceæ grows in great luxuriance. The Government has not, however, made any real effort to cultivate it, and what has been done in that respect has been effected, up to the present date, by private enterprise. Various writers have stated that abacá is to be obtained in the north of the Celebes. Bickmore, however, says positively that the inhabitants having made great efforts in attempting its successful cultivation, have abandoned it again in favor of the cultivation of coffee, which is found to be far more profitable.* According to previous statements, Guadaloupe appears to be able to produce abacá (fiber of the $M$. textilis?); $\dagger$ and Pondicherry and Guadaloupe have produced fabrics woven from abacá, and French Guiana stuffs from the fiber of the edible banana; $\ddagger$ all these, however, are only experiments.

Royle affirms that the Manila hemp (abacá fiber) excels the Russian in firmness, lightness, and strength in tension, as well as in cheapness, and has only the one disadvantage that ropes made from it become stiff in wet weather. The reason, however, is found in the manner in which it is spun, and may be avoided by

[^150]Peculiar to the Philinpines.

Superiorityo filber.
proper preparation.* Through the better preparation of the raw material in Manila by means of adequate machinery, these difficulties have been overcome; but abacá no longer has the advantage of superior cheapness, as the demand has increased much faster than the supply. During the year 1859 it was worth from $£ 22$ to $£ 25$ per ton; in 1868, £45 per ton; while Russian hemp fetched $£ 31$ per ton. Thus in nine years it rose to double its value.

Cultivation.

In Albay there are about twelve varieties of the best banana cultivated, which are particularly favored by the qualities of the soil. The cultivation is extremely simple, and entirely independent of the seasons. The plants thrive best on the slopes of the volcanic mountains (in which Albay and Camarines abound), in open spaces of the woods protected by the trees, which cast their shadows to an extent of about sixty feet. In exposed level ground they do not thrive so well, and in marshy land not at all.

In the laying out of a new plantation the young shoots are generally made use of, which sprout so abundantly from the roots that each individual one soon becomes a perfect plant. In favorable ground the custom is to allow a distance of about ten feet between each plant; in poor ground six feet. The only care necessary is the extermination of the weeds, and clearing away the undergrowth during the first season; later on, the plants grow so luxuriantly and strongly that they entirely prevent the growth of anything else in their vicinity. The protection afforded by the shade of the trees at this period is no longer required, the young buds finding sufficient protection against the sun's rays under cover of the fan-like leaves. Only in excep-

[^151]tional cases, contrary to the usual practice, are the plants raised from seed. The fruit, when ready, is cut off and dried, though care must be taken that it is not over ripe; otherwise the kernels will not germinate. These latter are about the size of peppercorns; and the extraction of them in the edible species almost always brings about decay. Two days before sowing, the kernels are taken out of the fruit, and steeped overnight in water; on the following day they are dried in a shady place; and on the third day they are sown in holes an inch deep in fresh, unbroken, and well-shaded forest ground, allowing six inches distance between each plant and row. After a year the seedlings, which are then about two feet high, are planted out, and tended in the same way as the suckers. While many of the edible bananas bear fruit after one year, and a few
varieties even after six months, the abacá plant requires on an average three years to produce its fiber in a proper

Differences with abacá. condition; when raised from suckers four years; and raised from year-old seedlings, even under the most favorable conditions, two years.

On the first crop, only one stalk is cut from each bush; but later on the new branches grow so quickly that they can be cut every two months.* After a few years the plants become so strong and dense that it is scarcely possible to push through them. Bast is in its best condition at the time of blossoming; but, when the price of the fiber happens to stand high in the market, this particular time is not always waited for.

Plants which have blossomed cease to be profitable in any way, by reason of the fiber becoming too weaka matter of too great nicety for the unpractical consummers on the other side of the Atlantic to decide

[^152]Prejudice against cutting after blossoming.
upon, and one in which, despite inquiries and careful inspections, they might be deceived. There really is no perceptible reason why the fiber should become weaker through fructification, which simply consists in the fact of the contents of the vascular cells changing into soluble matter, and gradually oozing away, the consequence of which is that the cells of the fiber are not replenished. These, on the contrary, acquire additional strength with the age of the plant, because the emptied cells cling so firmly together, by means of a certain resinous deposit, that it is impossible to obtain them unbroken without a great deal of trouble. The idea may have erroneously arisen from the circumstance that, previously to drying, as with hemp, the old plants were picked out, and allowed to be thrown away, though not without considerably increasing the rate of pay, which already consumed the greater part of the general expenses.*

Extracting the fiber.

In order to obtain the bast, the stalk above ground is closely pruned and freed from leaves and other encumbrances; each leaf is then singly divided into strips-a cross incision being made through the membrane on the inner or concave side, and connected by means of the pulpy parts (the parenchym) clinging together. In this manner as much as possible of the clear outer skin only remains behind. Another method is to strip the bast from the undivided stem. To effect this the operator makes an oblique incision in the skin of the under part of the stalk, drawing the knife gradually to the tip, and stripping off the whole length as broad a piece as possible; and the operation is repeated as many times as practicable. This method of handling

[^153]is more productive than the one previously described; but, on the other hand, it takes considerably more time, and for that reason is not often practised. The strips of bast are then drawn under a knife, the blade of which is three inches broad by six long, fastened at one end to the extremity of a flexible stick so that it is suspended perpendicularly over a well-smoothed block, and at the other end to a handle connected by means of a cord to a treadle, which can be pressed firmly down, as occasion requires. The workman draws the bast, without any regard to quality, between the knife and block, commencing in the middle, and then from side to side. The knife must be free from notches, or all indentations, according to the direction of Father Blanco.*

Three hired-men usually get twenty-five pounds per Laborers' work day. One worker cuts up the stalks, strips off the leaves, and attends to the supply; the second, frequently a boy, spreads out the strips; and the third draws them under the knife. A single plant has been known to yield as much as two pounds of fiber; but the most favorable average rarely affords more than one pound, and plants grown in indifferent soil scarcely a sixth of that quantity. The plantations are worked either by the owner or by day-laborers, who, when the market prices are very low, take half share of the crop harvested by them. In these cases an industrious workman may obtain as much as one picul in a week. During my stay exceptionally low prices ruled-sixteen and onehalf reals per picul undelivered. The workman could, therefore, in six days earn half the amount, viz., eight and a quarter reals at a rate of one and three-eighths

[^154]reals per day. The day's pay at that time was half a real, and board a quarter of a real, making together three-quarters of a real.

Lupis and bandala.

Grades of lupis.

The edges of the petioles, which contain much finer fiber than the middle parts, are separately divided into strips an inch wide, and with strong pressure are drawn several times under the knife. This substance, which is called lupis, is in high request, being employed in the native weaving; while bandala is chiefly used for ships' rigging.*

Lupis, according to the fineness of the fiber, is sorted into four classes-first, Binani; second, Totogna; third, Sogotan; and fourth, Cadaclan. A bundle of these is then taken up in the left hand, and, while with the right the first three sorts are inserted between the fingers, the fourth is held between the thumb and forefinger. This last description is no longer used in fine weaving, and is therefore sold with bandala. After the fine sorts have been pounded in a rice-mortar, in order to render the fiber soft and pliable, they are severally knotted into one another, and converted into web.

Lupis fabrics.
Generally the first sort is worked as woof with the second as warp, and the third as warp with the second as woof. The fabrics so woven are nearly as fine as piña fabrics (Nipis de Piña), and almost equal the best quality of cambric; and, notwithstanding the many little nodules occasioned by the tangling of the fiber, which may be discerned on close inspection, are clearer and

[^155]stouter, and possess a warmer yellowish tint.* As to these last three qualities-purity, flexibility, and colorthey stand in relation to cambric somewhat as cardboard to tissue-paper.

Weaving such fabrics on very simple looms is exceedingly troublesome as the fibers, which are not spun but twisted, very frequently break. The finest stuffs require so great an amount of dexterity, patience, and time in their preparation, and for that reason are so expensive, that they would find no purchasers in Europe where there is the competition of cheap, machine-made goods. Their fine, warm yellowish color also is objected to by the European women, who are accustomed to linen and calicoes strongly blued in the washing. In the country, however, high prices are paid for them by the rich mestizos, who understand the real goodness of their qualities.

The fibers of the inner petioles, which are softer but not so strong as the outer, are called tupus, and sold with bandala, or mixed with tapis and used in the native weaving. Bandala also serves for weaving purposes; and, in that portion of the Archipelago where the native abacá plantations are, the entire dress of both sexes is made of coarse guinara. Still coarser and stronger fabrics are prepared for the European market, such as crinoline and stiff muslin used by dressmakers.

Before the arrival of the Spaniards the natives wore stuffs from abacá; which became an important article of export only some few decades since. This is in great measure due to the enterprising spirit of two American firms, and would not have been attained without great perseverance and liberal pecuniary assistance.

[^156]Bandala fabrics.

A Pre-Spanish product.

Unbusinesslike early methods.

The plants flourish without any care or attention, the only trouble being to collect the fiber; and, the bounteousness of Nature having provided them against want, the natives shirk even this trouble when the market price is not very enticing. In general low prices are scarcely to be reckoned on, because of the utter indifference of the laborers, over whom the traders do not possess enough influence to keep them at work. Advances to them are made both in goods and money, which the creditor must repay either by produce from his own plantation or by giving an equivalent in labor.* As long as the produce stands high in price, everything goes on pretty smoothly, although even then, through the dishonesty of the workers and the laziness, extravagance, and mercantile incapacity of the middlemen, considerable loss frequently ensues. If, however, prices experience any considerable fall, then the laborers seek in any and every way to get out of their uncomfortable position, whilst the percentage of profit secured to the middleman is barely sufficient to cover the interest on his outlay. Nevertheless, they must still continue the supplies, inasmuch as they possess no other means of securing payment of their debt in the future. The laborers, in their turn, bring bitter complaints against the agents, to the effect that they are forced to severe labor, unprofitable to themselves, through their acceptance of advances made to them at most exorbitant rates; and the agents (generally mestizos or creoles) blame the crafty, greedy,

[^157]extortionate foreigners, who shamelessly tempt the lords of the soil with false promises, and bring about their utter ruin. As a general rule, the "crafty foreigner" experiences a considerable diminution of his capital. It was just so that one of the most important firms suffered the loss of a very large sum. At length, however, the Americans, who had capital invested in this trade, succeeded in putting an end to the custom of advances, which hitherto had prevailed, erected stores and presses on their own account, and bought through their agents direct from the growers. All earlier efforts tending in this direction had been effectually thwarted by the Spaniards and creoles, who considered the profits derived from the country, and especially the inland retail trade, to be their own by prescriptive right. They are particularly jealous of the foreign intruders, who enrich themselves at their expense; consequently they place every obstacle in their way. If it depended upon the will of these people, all foreigners would be ejected from the country-the Chinese alone, as workmen (coolies), being allowed to remain.*

The same feeling was exhibited by the natives towards the Chinese, whom they hated for being industrious and

Change to a safer basis. trustworthy workers. All attempts to carry out great undertakings by means of Chinese labor were frustrated by the native workmen intimidating them, and driving them away either by open violence or by secret persecution; and the Colonial authorities were reproached for not affording suitable protection against these and similar outrages. That, as a rule, great undertakings did not succeed in the Philippines, or at least did not yield a profit commensurate with the outlay and trouble, is a fact beyond dispute, and is solely to be ascribed to many of the

[^158]Good work for good pay.
ardy justice to foreigners.

Abacáproduction and prospects.
circumstances related above. There are those, however, who explain these mishaps in other ways, and insist upon the fact that the natives work well enough when they are punctually and sufficiently paid. The Government, at any rate, appears gradually to have come to the conclusion that the resources of the country cannot be properly opened up without the assistance of the capital and enterprise of the foreigners; and, therefore, of late years it has not in any way interfered with their establishment. In 1869 their right of establishment was tardily conceded to them by law.
At this period the prospects of the abacá cultivation seemed very promising; and since the close of the American war, which had the effect of causing a considerable fall in the value of this article in America, the prices have been steadily increasing. It is stated (on authority) that, in 1840, 136,034 piculs of abacá, to the value of $\$ 397,995$ were exported, the value per picul being reckoned at about $\$ 2.09$. The rate gradually rose and stood between four and five dollars-and, during the civil war, reached the enormous sum of nine dollars per piculthe export of Russian hemp preventing, however, a further rise. This state of affairs occasioned the laying out of many new plantations, the produce of which, when it came on the market, after three years, was valued at $\$ 3.50$ per picul, in consequence of the prices having returned to their normal condition; and even then it paid to take up an existing plantation, but not to lay out a new one. This rate continued until 1860, since which time it has gradually risen (only during the American civil war was there any stoppage), and it now stands once more as high as during the civil war; and there is no apparent prospect of a fall so long as the Philippines have no competitors in the trade. In 1866 the picul in Manila never cost less than $\$ 7$ which two years previously
was the maximum value; and it rose gradually, until $\$ 9.50$ was asked for ordinary qualities. The production in many provinces had reached the extreme limit; and a further increase, in the former at least, is impossible, as the work of cultivation occupies the whole of the male population-an evidence surely that a suitable recompense will overcome any natural laziness of the natives.*

An examination of the following table will confirm the accuracy of these views:-

EXPORT OF ABACA (In Piculs).

| To | 1861 | 1864 | 1866 | 1868 | 1870 | 1871 | Export af <br> "Manila |
| :---: | :---: | :---: | :---: | :---: | :---: | :---: | :---: |
| Great Britain. | 198,954 | 226,258 | 96,000 | 125,540 | 131,180 | 143,498 |  |
| North America, | 158,610 | 249,106 | 280,000 | 294,728 | 327,728 | 285,112 |  |
| California ...... | 6,600 | 9,426 | - | 14,200 | 15,900 | 22,500 |  |
| Europe | 901 | 1,134 | - | 200 | 244 | 640 |  |
| Australia | 16 | 5,194 | - | 21,244 | 11,434 | 6,716 |  |
| Singapore | 2,648 | 1,932 | - | 3,646 | 1,202 | 2,992 |  |
| China | 5,531 | 302 | - | - | 882 | 2,294 |  |
| Total.. | 273,260 | 493,352 | 406,682 | 460,558 | 488,570 | 463,752 |  |
|  | Commercial Report | Prussian Consular Report | Belgian Consular Report | English Consular Report | $\begin{gathered} \text { Market } \\ \text { T. H. } \end{gathered}$ | Report, <br> Co. |  |

The consumption in the country is not contained in the above schedule, and is difficult to ascertain; but it must certainly be very considerable, as the natives throughout entire provinces are clothed in guinara, the weaving of which for the family requirements generally is done at home.

Sisal, also sisal-hemp, or, as it is sometimes known,

Large local consumption.

Sisal-hemp. Mexican grass, has for some years past been used in the trade in increasing quantities as a substitute for abacá, which it somewhat resembles in appearance, though wanting that fine gloss which the latter possesses. It is somewhat weaker, and costs from $£ 5$ to $£ 10$ less per ton; it is only used for ships' rigging. The refuse from it has been found an extremely useful adjunct to the ma-

[^159]terials ordinarily used in the manufacture of paper. The Technologist for July, 1865, calls attention to the origin of this substitute, in a detailed essay differing essentially from the representations contained in the " U . S . Agricultural Report" published at Washington in 1870 ; and the growing importance of the article, and the ignorance prevailing abroad as to its extraction, may render a short account of it acceptable. The description shows the superior fineness of the abacá fiber, but not its greater strength.*

Sisal-hemp, which is named after the export harbor of Sisal (in the north-western part of the peninsula), is by far the most important product of Yucatan; and this rocky, sun-burnt country seems peculiarly adapted to the growth of the fiber. In Yucatan the fiber is known as jenequem, as indeed the plant is obtained

Varieties of sisal. from it. Of the latter there are seven sorts or varieties for purposes of cultivation; only two, the first and seventh, are also to be found in a wild state. First, Chelem, apparently identical with Agave angustifolia; this ranks first. Second, Yaxci (pronounced Yachki; from yax, green, and tri, agave), the second in order; this is used only for fine weaving. Third, Sacci (pronounced Sakki; sack, white), the most important and productive, supplying almost exclusively the fiber for exportation; each plant yields annually twenty-five leaves, weighing twenty-five pounds, from which is obtained one pound of clear fiber. Fourth, Chucumci, similar to No. 3, but coarser. Fifth, Babci; the fiber very fair, but the leaves rather small, therefore not very productive. Sixth, Citamci (pronounced Kitamki; kitam, hog);

[^160]neither good nor productive. Seventh, Cajun or Cajum, probably Fourcroya cubensis; leaves small, from four to five inches long.

The cultivation of sisal has only in recent times been prosecuted vigorously; and the extraction of the fiber from the leaves, and the subsequent spinning for ships' rigging, are already done by steam-machinery. This occupation is especially practiced by the Maya Indians, a memorial of the Toltecs, who brought it with them upon their emigration from Mexico, where it was in vogue long before the arrival of the Spaniards.

The sisal cultivation yields an annual profit of 95 Proft. per cent. A mecate, equal to five hundred seventy-six square yards (varas), contains sixty-four plants, giving sixty-four pounds of clear fiber, of the value of $\$ 3.84$; which, after deducting $\$ 1.71$, the cost of obtaining it, leaves $\$ 2.13$ remaining. The harvesting commences from four to five years after the first laying out of the plantation, and continues annually for about fifty or sixty years.

In tropical countries there is scarcely a hut to be seen without banana trees surrounding it; and the idea presented itself to many to utilize the fiber of these plants, at that time entirely neglected, which might be done by the mere labor of obtaining it; besides which, the little labor required for their proper cultivation is quickly and amply repaid by their abundant fruitfulness.*

[^161]Machinespinning.

Banana substitute unsatisfactory.

This idea, however, under the existing circumstances, would certainly not be advantageous in the Philippines, as it does not pay to obtain bast from the genuine abacá plant as soon as it has borne fruit. The fiber of the edible banana might very well be used as material for papermaking, though obtaining it would cost more than the genuine bandala.

Fiber-extracting machinery.

In the Report of the Council of the Society of Arts, London, May 11, 1860, attention was called to a machine invented by F. Burke, of Montserrat, for obtaining fiber from banana and other endogenous plants. While all the earlier machines worked the fiber parallelwise, this one operated obliquely on it; the consequence of which was that it was turned out particularly clear. With this machine, from seven to nine per cent. of fibrous substance may be obtained from the banana. The Tropical Fiber Company have sent these machines to Demerara, also to Java and other places, with the design of spinning the fiber of the edible banana, and also to utilizesome portions of the plant as materials in the manufacture of paper. Proofs have already been brought forward of fiber obtained in this manner in Java, the value of which to the spinner has been reckoned at from $£ 20$ to $£ 25$. It does not appear, however, that these promising experiments have led to any important results; at least, the consular reports which have come to hand contain no information on the subject. In the obtaining of bandala in the Philippines this machine has not yet been used; nor has it even been seen, though the English consul, in his latest report, complains that all the hitherto ingeniously constructed machines have proved virtually useless.

The bast of the edible banana continues still to be used in the Philippines, notwithstanding that the plants, instead of being grown, as in many parts of America,
in large well-tended gardens, are here scattered around the huts; but the forwarding of the raw material, the local transport, and the high freightage will always render this material too expensive for the European market (considering always its very ordinary quality)$£ 10$ per ton at the very least; while "Sparto grass" (Lygaeum spartum, Lœeff.), which was imported some few years since in considerable quantities for the purpose of paper-making, costs in London only $£ 5$ per ton.* The jute (Corchurus casularis) coffee-sacks supply another cheap paper material. These serve in the fabrication of strong brown packing paper, as the fiber will not stand bleaching. According to P. Symmonds, the United States in recent years have largely used bamboo. The rind of the Adansonia digitata also yields an extremely good material; in particular, paper made entirely from New Zealand flax deserves consideration, being, by virtue of its superior toughness, eminently suited for "bill paper."

It must not be overlooked that, in the manufacture of paper, worn linen and cotton rags are the very best materials that can be employed, and make the best paper. Moreover, they are generally to be had for the trouble of collecting them, after they have once covered the cost of their production in the form of clothing materials; when, through being frayed by repeated washings, they undergo a preparation which particularly adapts them to the purpose of paper-making.

The more paper-making progresses, the more are ligneous fibers brought forward, particularly wood and

Preferability of discarded cloth.

Increasing use of wood and straw. straw, which produce really good pastes; all the raw

[^162]materials being imported from a distance. That England takes so much sparto is easily explained by the fact that she has very little straw of her own, for most of the grain consumed by her is received from abroad in a granulated condition.

## XXV

Tobaccorevenue. Of all the productions of the country tobacco is the most important, so far (at least) as concerns the Government, which have the cultivation of this plant, its manipulation, and sale, the subjects of an extensive and strictly guarded monopoly, and derives a very considerable portion of the public revenue therefrom.*. As to the objections raised against this revenue on the score of its being opposed to justice and morality, many other sources of revenue in the colonial budget might be condemned (such as the poll-tax, gaming and opium licenses, the brandy trade, and the sale of indulgences); yet none is so invidious and pernicious as the tobacco monopoly.

Often in the course of this narrative of my travels I have had occasion to commend the clemency of the Spanish Government. In glaring contrast therewith, however, stands the management of the tobacco regulations. They appropriated the fields of the peasantry without the slightest indemnification-fields which had been brought under cultivation for their necessary means of sustenance; forced them, under penalty of bodily punishment, to raise, on the confiscated property, an article which required an immense amount of trouble and attention, and which yielded a very uncertain crop; and they then valued the harvested leaves arbitrarily

[^163]and without any appeal, and, in the most favorable case, paid for them at a nominal price fixed by themselves. To be paid at all, indeed, appears to have been a favor, for it has not been done in full now for several years in succession. Spain regularly remains indebted to the unlucky peasants in the amount of the miserable pittance allowed, from one year's end to another. The Government ordered the officials to exact a higher return from the impoverished population of the tobacco districts; and even rewarded informers who, after pointing out fields already owned, but which were considered suitable to the cultivation of tobacco, were installed into possession of the proclaimed lands in the place of the original owners.

For proofs of these accusations, one need only peruse a few paragraphs contained in the following stringent regulations, entitled "General Instructions,"* and, further, a few extracts from the official dispatches of Intendant-General Agius to the Colonial Minister:- $\dagger$

Cap. 25, § 329. The compulsory system of cultivation in Cagayan, New Vizcaya, Gapan, Igorots, and regulations. Abra to remain in force.
$\S$ 331. The Director-General of the Government is authorized to extend compulsory labor to the other provinces, or to abolish it where already introduced. These instructions may be altered wholly or in part as occasion requires.
§ 332. Prices may be either increased or lowered.
§ 337. Claims or actions concerning the possession of tobacco lands pending before the usual tribunal shall not prevent such lands from being used for the purposes of tobacco cultivation, the present proprietor being under strict obligation to continue the cultivation either in person or by substitute. (If he omits to do so, the magistrate or judge takes upon himself to appoint such substitute.)

[^164]§ 351. The collectors have received denuncias, i. e. information, that land adapted to tobacco growing is lying fallow, and that it is private property. In case such land is really suitable to the purposes of tobacco cultivation, the owners thereof are hereby summoned to cultivate the same with tobacco in preference to anything else. At the expiration of a certain space of time the land. in question is to be handed over to the informer. Be it known, however, that, notwithstanding these enactments, the possessory title is not lost to the owner, but he is compelled to relinquish all rights and usufruct for three years.
Cap. 27, § 357. An important duty of the collector is to insure the greatest possible extension of the tobacco cultivation upon all suitable lands, but in particular upon those which are specially convenient and fertile. Lands which, although suitable for tobacco growing, were previously planted with rice or corn, shall, as far as practicable, be replaced by forest clearings, in order, as far as possible, to prevent famine and to bring the interests of the natives into harmony with those of the authorities.
§ 361. In order that the work which the tobacco cultivation requires may not be neglected by the natives, and that they may perform the field work necessary for their sustenance, it is ordered that every two persons working together shall, between them cultivate eight thousand square varas, that is, two and one-half acres of tobacco land.
§ 362. Should this arrangement fail to be carried out either through age, sickness, or death, it shall be left to the priest of the district to determine what quantity of work can be accomplished by the little children, having regard to their strength and number.
§ 369. Every collector who consigns from his district 1,000 fardos more than in former years, shall receive for the overplus a double gratuity, but this only where the proportion of first-class leaves has not decreased.
$\S 370$. The same gratuity will be bestowed when there is no diminution in bulk, and one-third of the leaves is of first-class quality.

The following sections regulate the action of the local authorities:-
§ 379. Every governor must present annually a list, revised by the priest of the district, of all the inhabitants in his district of both sexes, and of those of their children who are old enough to help in the fields.
§ 430. The officers shall forward the emigrants on to Cagayan and Nueva Vizcaya, and will be entrusted with $\$ 5$ for that purpose, which must be repaid by each individual, as they cannot be allowed to remain indebted in their province.
§ 436. Further it is ordered by the Buen Gobierno (good government) that no Filipino shall be liable for a sum exceeding $\$ 5$, incurred either as a loan or a simple debt. Thus the claim of a higher sum can not impede emigration.
§ 437. The Hacienda (Public Treasury) shall pay the passage money and the cost of maintenance from Ilocos.
§ 438. They are to be provided with the means of procuring cattle, tools, etc., until the first harvest (although the Indian is only liable for \$5).
§ 439. Such advances are, it is true, personal and individual; but, in the case of death or flight of the debtor, the whole village is to be liable for the amount due.

Tobacco (Nicotiana tabacum, L.) was introduced into the Philippines soon after the arrival of the Spaniards by the missionaries, who brought the seed with them from Mexico.* The soil and climate being favorable to its production, and the pleasure derived from it

[^165]T'obacco from
Mexico.
being speedily discovered by the natives, naturally assisted in its rapid adoption. Next to the Cuban tobacco and a few sorts of Turkish* it is admitted to be the best; and in the colony it is asserted by competent judges that it would soon surpass all others, if the existing regulations were abolished and free trade established. There can be no doubt in the minds of impartial observers that the quality and quantity of the produce might be considerably increased by such a change; on the other hand, many of the prejudiced officials certainly maintain the direct contrary. The real question is, to what extent these expectations may be realized in the fulfilment of such a measure; of course, bearing in mind that the judgment is swayed by a strong desire for the abolition of a system which interferes at present with their prospects of gain. But the fact is that, even now, the native grown tobacco, notwithstanding all the defects inseparable from an illicit trade, is equal

High grade of Philippine product.

Manila tobacco handicapped. to that produced by the Government officials in their own factories, and is valued at the same rate with many of the Havana brands; and the Government cigars of the Philippines are preferred to all others throughout Eastern Asia. Indeed, rich merchants, to whom a difference of price is no object, as a rule take the Manila cigars before Havanas.

According to Agius ("Memoria," 1871), in the European market the Manila tobacco was admitted to be without any rival, with the sole exception of the Vuelta abajo of Cuba; and most certainly in the Asiatic and Oceanic ports its superior quality was undisputed,

[^166]as the Havana tobacco loses its flavor on the long voyage to these countries; but now, from year to year, it is surely losing its reputation. If, then, the Manila cigars have not hitherto succeeded in making themselves acceptable in Europe on account of their inferiority, the blame is attributable simply to the system of compulsory labor, and the chronic insolvency of the Insular Treasury, whilst the produce of other tobacco countries has steadily progressed in quality in consequence of free competition. The fame of the Manila cigars may also have suffered in some slight measure from the wide-spread, though perfectly erroneous, idea that they contained opium.

How greatly the produce might be increased by means of free trade is shown under other circumstances by the example of Cuba. At the time when the Government there monopolized the tobacco trade, the crops were only partly sufficient to cover the home consumption; whereas, at the present time, Cuba supplies all the markets of the world.* The decision of CaptainGeneral De la Gandara upon this question is in the highest degree worthy of notice. In a MS. Report to the Colonial Minister, March, 1868, concerning a measure for rendering the regulations of the tobacco monopoly still more stringent, he says: "If the tobacco cultivation is placed without restriction into the hands of private traders, we shall most probably, in a few years, be in a position to command nearly all the markets in the world." Most of the islands produce tobacco. According to

[^167]Origin of monopoly.

Governor
Basco's innovations.
the quality of the produce, the tobacco provinces rank in the following order: First, Cagayan and Isabela; Second, Igorots; Third, Island of Mindanao; Fourth, Bisayas; Fifth, Nueva Ecija.

From the Government Order, dated November 20, 1625, it is evident that even at that early period the sale of betel nut, palm spirit (toddy), tobacco, etc., was a Government monopoly: but it does not seem to have been very strictly carried out. The tobacco monopoly, as it stands at present, the whole trade of which from the sowing of the seedling plants to the sale of the manufactured article is exclusively in the hands of the Government, was first introduced by Captain-General José Basco y Vargas. And a Government Order, under date of January 9, 1780 (confirmed by Departmental Regulations, December 13, 1781), further enacted that the tobacco regulations should be extended to the Philippine Islands, in like manner as in all Spanish possessions in this and the other hemisphere (de uno $y$ otro mundo).

Before the administration of this very jealous Governor, for a period of two hundred years the colony received annual contributions from New Spain (Situado de Nueva España). In order to relieve the Spanish Exchequer, from this charge Basco introduced (at that time national economic ideas prevailed of making the natural resources of a State supply its immediate wants) a plan upon which, fifty years later, Java modelled its "Culture System." In the Philippines, however, the conditions for this system were less favorable. In addition to the very slight submissiveness of the population, there were two great obstacles in the opposition of the priests and the want of trustworthy officials. Of all the provincial trades brought into existence by the energy of Basco, the indigo cultivation is the only one that
remains in the hands of private individuals, the tobacco trade still being a Government monopoly.* Basco first of all confined the monopoly to the provinces immediately contiguous to the capital, in all of which the cultivation of tobacco was forbidden under penalty of severe punishment, except by persons duly authorized and in the service of the Government. $\dagger$ In the other provinces the cultivation was to a certain extent permitted; but the supply remaining after deduction of what was consumed in each province was to be sold to the Government only.

In the Bisayas the magistrates purchased the tobacco for the Government and paid for it at the rate previously fixed by the Government factories at Manila; and they were allowed to employ the surplus money of the Government treasury chest for this purpose. A worse system than this could scarcely be devised. Officials, thinking only of their own private advantage, suffered no competition in their provinces, employed their official power to oppress the producer to the utmost extent, and thereby naturally checked the production; and the Government treasury chest consequently suffered frequent losses through bankruptcies, inasmuch as the magistrates, who drew a salary of $\$ 600$ and paid a license of from $\$ 100$ to $\$ 300$ for the right of trading, in order to make money quickly, engaged in the most hazardous speculations. In 1814 this stupid arrangement was first put an end to; and forthwith the tobacco supplies from the Bisayas increased, through the competition of the

[^168]private dealers, who then, for the first time, had the power of purchase; and from 1839 the planters were empowered to obtain higher prices than those afforded by the greedy monopolizing magistrates. At present, the following general regulations are in force, subject, however, to continual variation in details.

Changes bring improvement.

Different usages in Bisayas and Mindanao.

By a Departmental Order, September 5, 1865, the cultivation of tobacco was permitted in all the provinces, though the produce was allowed to be sold only to the Government at the price regulated by them. The wholesale purchases are made in Luzon and the adjacent islands in fardos,* by "colleccion," that is, direct through the finance officials, who have the management of the plants from the sowing; but in the Bisayas by acopio; that is, the Government officials buy up the tobacco tendered by the growers or speculators by the cwt.
In the Bisayas and in Mindanao everybody is allowed to manufacture cigars for his own particular use, though trade therein is strictly prohibited; and advances to the tobacco growers are also made there; while in Luzon and the neighboring islands the Government provides seed and seedling plants. Here, however, no land which is adapted to the cultivation of tobacco is allowed to be used for any other purpose of agriculture.

Crude system of grading.

As the Financial Administration is unable to classify the tobacco at its true value, as might be done were free competition permitted, they have adopted the expedient of determining the price by the size of the leaves; the care necessary to be bestowed upon the training of the plants in order to produce leaves of the required

[^169]size being at least a guarantee of a certain amount of proper attention and handling, even if it be productive of no other direct good.*

It is well known at Madrid how the tobacco monopoly, by oppressing the wretched population, interferes

Burden knowingly increased. with the prosperity of the colony; yet, to the present day, the Government measures have been so arranged as to exact a still larger gain from this very impolitic source of revenue.

\footnotetext{

* Regulations for the tobacco collection agencies in Luzon.-1st. Four classes of Tobacco will be purchased. 2nd. These classes are thus specified: the first to con iist of leaves at least 18 inches long ( $0 \mathrm{~m} \mathrm{418;}$ ) the second of leaves between 14 and 18 inches ( 0 m 325 ); the third of leaves between 10 and 14 inches ( 0 m 232 ); and the fourth of leaves at least 7 inches in length ( 0 m 163 ). Smaller leaves will not be accepted. This last limitation, however, has recently been abandoned so that the quality of the tobacco is continually deprecinting in the hands of the Government, who have added two other classes.

A fardo, 1st class, weighs 60 lbs ., and in 1867 the Government rate of pay was as follows:-

| 1 Fardo, 1st class, 60 lbs | \$9.50 |
| :---: | :---: |
| 1 Fardo, 2nd class, 46 lbs. | 6.00 |
| 1 Fardo, 3rd class, $33 \mathrm{lbs}$. | 2.75 |
| 1 Fardo, 4th class, 18 lbs | 1.00 |

The following table gives the different brands of cigars manufactured by the Government, and the prices at which they could be bought in 1867 in Estanco (i. e. a place privileged for the sale):-

| Menas (Classes.) | Corresponding Havana Brands. | PRICE. |  |  | Number of cigars roba. |
| :---: | :---: | :---: | :---: | :---: | :---: |
|  |  | $\left\lvert\, \begin{gathered} \text { Per } \\ \text { tarroba } \end{gathered}\right.$ | $\begin{gathered} \text { Per } \\ 1000 . \end{gathered}$ | Per. cigar |  |
|  |  | Dols. | Dols. | Cents. |  |
| Imperiales. | The same. | 37.50 | 30.00 | 4 |  |
| Prima Veguéro... | Do. | 37.50 | 30.00 | 4 |  |
| Segunda Veguéro. ${ }_{\text {Prima }}$ | Regalia. Do. |  | 26.00 26.00 | . | . |
| 2.a Superiór Filipino... | None. | 38.00 | 26.00 19.00 | 3 |  |
| 3.a Superiór Filipino... | Londres |  | 15.10 |  |  |
| Prima Filipino. . . | Superior Habano. | 21.00 | 15.00 | 2 | 1400 |
| Segunda Superior | Segunda superior <br> Habano | 24.00 | 8.571 | 1 | 2800 |
|  | The Same | 21.00 | 15.00 | 2 | 1400 |
| Segunda Cortado | Do. | 24.00 | $8.57 \frac{1}{8}$ | 1 | 2800 |
| Mista........... | Segunda Batído. | 20.50 | . . |  |  |
| Prima Batigo, larga. | None. | 18.75 |  | 1 | 1800 |
| Segunda Batido, largo. . | None. | 18.75 |  | $\frac{1}{3}$ | 3750 |

"Killing the goose that lays the golden egg."

A Government Order of January, 1866, directed the tobacco cultivation in the Philippines to be extended as much as possible, in order to satisfy the requirements of the colony, the mother country, and also the export trade; and in the memorial already quoted, "reforms" are proposed by the Captain-General, in the spirit of the goose with golden eggs. By grafting new monopolies upon those already existing, he believes that the tobacco produce can be increased from 182,102 cwt. (average of the years 1860 to 1867) to 600,000 , and even 800,000 cwt. Meantime, with a view to obtaining increased prices, the Government resolved to export the tobacco themselves to the usual markets for sale; and in the year 1868 this resolution was really carried out. It was sent to London, where it secured so favorable a market that it was at once decreed that no tobacco in Manila should thenceforth be sold at less than $\$ 25$ per cwt.* This decree, however, referred only to the first three qualities, the quantity of which decreased in a relative measure with the increased pressure upon the population. Even in the table annexed to the record of La Gandara this is very clearly shown. Whilst the total produce for 1867 stood at $176,018 \mathrm{cwt}$. (not much under the average of the years 1860 to 1867 , viz., 182,102 cwt.), the tobacco of the first class had decreased in quantity since 1862 from over 13,000 to less than 5,000 cwt.

Gift to Spain of unusable tobacco.

The fourth, fifth, and sixth classes, the greater part of which would before have been burnt, but which now form no inconsiderable portion of the total crop, are in the open markets positively unsaleable, and can be utilized only in the form of a bonus to Spain, which

[^170]annually receives, under the title of atenciones $a$ $l a$ peninsula, upwards of $100,000 \mathrm{cwt}$. If the colony were not compelled to pay half the freight of these gifts, Spain would certainly ask to be relieved of these "marks of attention." Seeing that, according to the decision of the chief of the Government, the greater portion of this tobacco is of such inferior quality that it can find no purchaser at any price, it is impossible that its value should cover either the cost of carriage or the customs duty. Moreover, this tobacco tribute is a great burden on the colonial budget; which, in spite of all deficits, is charged with the expenses attending the collection of the tobacco, its packing, its cost of local transport, and half the expense of its carriage to Europe.

Dated in March, 1871,--the beginning of a Golden Age, if De La Gandara's plans had been carried out and his expectations realized,-there exists an excellent statement from the Intendant-General addressed to the Minister of Colonies pointing out plainly to the chief of the Government the disadvantages arising from this mode of administration, and urging the immediate repeal of the monopoly. In the next place proof was adduced, supported by official vouchers, that the profits derived from the tobacco monopoly were much smaller than usual. The total average receipts of the tobacco administration for the five years 1865 to 1869 , according to official accounts, amounted to $\$ 5,367,262$; for the years 1866 to 1870 , only $\$ 5,240,935$. The expenses cannot be accurately estimated, inasmuch as there are no strict accounts obtainable; if, however, the respective expenses charged in the colonial budget are added together, they amount to $\$ 3,717,322$ of which $\$ 1,812,250$ is for purchase of raw tobacco.

Besides these expenses pertaining exclusively to the tobacco administration there are still many other differ-

Slight real profit from monopoly.
ent items to be taken into account; yet the cost incurred in this branch of the service would be saved, if not altogether, at least largely, if the State surrendered the tobacco monopoly. The total of the disbursements must certainly, at the very lowest, be estimated at $\$ 4,000,000$; so, therefore, the State receives only a net profit of $\$ 1,367,000$; but even this is not to be reckoned on in the future, for if the Government does not speedily cease carrying on this trade, they will be forced into a very considerable and unavoidable expense. To begin with, they must erect new factories and warehouses; better machinery must be bought; wages will have to be considerably increased; and, above all, means must be devised to pay off the enormous sum of $\$ 1,600,000$ in which the Government is indebted to the peasants for the crops of 1869 and 1870 , and to assure cash payments for future harvests. "This is the only possible mode of preventing the decay of the tobacco cultivation in the different provinces, as well as relieving the misery of the wretched inhabitants."

Suffering and law-breaking thru the monopoly.

Later Agius proved how trifling in reality the arrears were on account of which the Government was abandoning the future of the colony, and showed the misfortunes, of which I shall mention, these briefly, only a few, resulting from the monopoly. He represented that the people of the tobacco district, who were the richest and most contented of all in the Archipelago, found themselves plunged into the deepest distress after the increase of the Government dues. They were, in fact, far more cruelly treated than the slaves in Cuba, who, from selfinterested motives, are well-nourished and taken care of; whereas in this case, the produce of compulsory labor has to be delivered to the State at an arbitrarily determined price; and even this price is paid only when the condition of the treasury, which is invariably in diffi-
culties, permits. Frequently their very means of subsistence failed them, in consequence of their being forbidden to carry on the cultivation; and the unfortunate people, having no other resources for the relief of their pressing necessities, were compelled to alienate the debtor's bond, which purchased the fruits of their enforced toil but had been left unpaid. Thus, for an inconsiderable deficit of about $\$ 1,330,000$, the whole population of one of the richest provinces is thrown into abject misery; a deep-rooted hatred naturally arises between the people and their rulers; and incessant war ensues between the authorities and their subjects. Besides which, an extremely dangerous class of smugglers have recently arisen, who even now do not confine themselves to mere smuggling, but who, on the very first opportunity presented by the prevailing discontent, will band themselves together in one solid body. The official administrators, too, are charged with gross bribery and corruption; which, whether true or not, occasions great scandal, and engenders increasing disrespect and distrust of the colonial administration as well as of the Spanish people generally.*

The preceding memorial has been not only written, but also printed; and it seems to indicate that gradually in Spain, and also in wider circles, people are becoming convinced of the untenableness of the tobacco monopoly; yet, in spite of this powerful review, it is considered doubtful by competent judges whether it will be given up so long as there are any apparent or appreciable returns derived therefrom. These acknowledged evils have long been known to the Colonial Government;

[^171]but, from the frequent changes of ministers, and the increasing want of money, the Government is compelled, so long as they are in office, to use all possible means of obtaining profits, and to abstain from carrying out these urgent reforms lest their own immediate downfall should be involved therein. Let us, however, cherish the hope that increased demand will cause a rise in the prices; a few particularly good crops, and other propitious circumstances, would relieve at once the Insular Treasury from its difficulties; and then the tobacco monopoly might be cheerfully surrendered. One circumstance favorable to the economical management of the State that would be produced by the surrender of the tobacco monopoly would be the abolition of the numerous army of officials which its administration requires. This might, however, operate reversely in Spain. The number of place-hunters created must be very welcome to the ministers in power, who thus have the opportunity of providing their creatures with profitable places, or of shipping off inconvenient persons to the Antipodes from the mother-country, free of cost. The colony, be it known, has not only to pay the salaries, but also to bear the cost of their outward and homeward voyages. Any way, the custom is so liberally patronized that occasionally new places have to be created in order to make room for the newly-arrived nominees.*

[^172]At the time of my visit, the royal factories could not turn out a supply of cigars commensurate with the

Wholesale rate
higher than
retail from
government. requirements of commerce; and this brought about a peculiar condition of things; the wholesale dealer, who purchased cigars in very considerable quantities at the government auctions, paying higher than the retail rates at which he could buy them singly in the estancia. In order, therefore, to prevent the merchants drawing their stocks from the estancias, it was determined that only a certain quantity should be purchased, which limit no merchant dared exceed. A very intricate system of control, assisted by espionage, had to be employed in seeing that no one, through different agents and different estancias, collected more than the authorised supply; and violation of this rule, when discovered, was punished by confiscation of the offender's stock. Everybody was free to purchase cigars in the estancia, but nobody was permitted to sell a chest of cigars to an acquaintance at cost price. Several Spaniards with whom I have spoken concerning these strange regulations maintained them to be perfectly just, as otherwise all the cigars would be carried off by foreigners, and they would not be able themselves in their own colony to smoke a decent cigar.

There was, as I afterwards learnt, a still more urgent Money jugling. reason for the existence of these decrees. The government valued their own gold at sixteen dollars per ounce, while in commerce it fetched less, and the premium on silver had, at one time, risen to thirty-three per cent. Moreover, on account of the insufficient quantity of copper money for minor currency, the small change frequently gained a premium on the silver dollar, so much so that by every purchaser not less than half a dollar was realized. In exchanging the dollar from five to fifteen per cent discount was charged;
it was profitable, therefore, to purchase cigars in the estancias with the gold ounce, and then to retail them in smaller quantities nominally at the rate of the estancias. Both premiums together might in an extreme case amount to as much as forty-three per cent.*

Not being able to give a description of the cultivation of tobacco from personal knowledge and experience, I refer the reader to the following short extract from the Cartilla Agricola:-

Directions for preparing and laying out the seed beds.A suitable piece of land is to be enclosed quadrilaterally by boundaries, ploughed two or three times, cleared of all weeds and roots, made somewhat sloping, and surrounded by a shallow ditch, the bed of which is to be divided by drains about two feet wide. The soil of the same must be very fine, must be ground almost as fine as powder, otherwise it will not mix freely and thoroughly with the extremely fine tobacco seed. The seed is to be washed, and then suspended in cloths during the day, in order to allow the water to run off; after which it is to be mixed with a similar quantity of ashes, and strewn carefully over the bed. The subsequent successful results depend entirely upon the careful performance of this work. From the time the seed first begins to sprout, the beds must be kept very clean, in dry weather sprinkled daily, and protected from birds and animals by brambles strewn over, and by means of light mats from storms and heavy rains. After two months the plants will be between five and six inches high, and generally have from four to six leaves; they must then be replanted. This occurs,

[^173]supposing the seed-beds to have been prepared in September, about the beginning or the middle of November. A second sowing takes place on the 15th of October, as much as a precaution against possible failure, as for obtaining plants for the lowlands.

Concerning the land most advantageous to the tobacco and its cultivation. Replanting of the seedlings.-Land must be chosen of middling grain; somewhat difficult, calciferous soil is particularly recommended, when it is richly fertilized with the remains of decayed plants, and not less than two feet deep; and the deeper the roots are inserted the higher will the plant grow. Of all the land adapted to the tobacco cultivation, that in Cagayan is the best, as from the overflowing of the large streams, which occurs every year, it is laid under water, and annually receives a new stratum of mud, which renders the soil particularly productive. Plantations prepared upon such soil differ very materially from those less favored and situated on a higher level. In the former the plants shoot up quickly as soon as the roots strike; in the latter they grow slowly and only reach a middling height. Again in the fertile soil the plants produce quantities of large, strong, juicy leaves, giving promise of a splendid harvest. In the other case the plants remain considerably smaller and grow sparsely. Sometimes, however, even the lowlands are flooded in January and February, and also in March, when the tobacco has already been transplanted, and grown to some little height. In that event everything is irreparably lost, particularly if the flood should occur at a time when it is too late to lay out new plantations. High-lying land also must, therefore, be cultivated, in the hope that by very careful attention it may yield a similar return. In October these fields must be ploughed three or four times, and harrowed twice or thrice. On account of the floods, the lowlands cannot be ploughed until the end of December, or the middle of January; when the work is light and simple. The strongest plants in the seed-beds are chosen, and set in the prepared grounds at a distance of three feet from each other, care being taken that the earth clinging to the roots is not shaken off.

Of the care necessary to be bestowed upon the plants.-In the east a little screen, formed by two clods, is to be erected, with a view to protecting the plant from the morning sun, and retaining the dew for a longer time. The weeds to be carefully exterminated, and the wild shoots removed. A grub which occasionally appears in great numbers is particularly dangerous. Rain is very injurious immediately before the ripening, when the plants are no longer in a condition to secrete the gummy substance so essential to the tobacco, which, being soluble in water, would be drawn off by the action of the rain. Tobacco which has been exposed to bad weather is always deficient in juice and flavor, and is full of white spots, a certain sign of its bad quality. The injury is all the greater the nearer the tobacco is to its ripening period; the leaves hanging down to the ground then decay, and must be removed. If the subsoil is not deep enough, a carefully tended plant will turn yellow, and nearly wither away. In wet seasons this does not occur so generally, as the roots in insufficient depth are enabled to find enough moisture.

Cutting and manipulation of the leaves in the drying shed.-The topmost leaves ripen first; they are then of a dark yellow color, and inflexible. They must be cut off as they ripen, collected into bundles, and brought to the shed in covered carts. In wet or cloudy weather, when the nightly dews have not been thoroughly evaporated by the sun, they must not be cut. In the shed the leaves are to hang upon cords or split Spanish cane, with sufficient room between them for ventilation and drying. The dried leaves are then laid in piles, which must not be too big, and frequently turned over. Extreme care must be taken that they do not become overheated and ferment too strongly. This operation, which is of the utmost importance to the quality of the tobacco, demands great attention and skill, and must be continued until nothing but an aromatic smell of tobacco can be noticed coming from the leaves; but the necessary skill for this manipulation is only to be acquired by long practice, and not from any written instructions.

## XXVI

An important portion of the population remains to be discussed, viz. the Chinese, who are destined to play

Importance of Chinese. a remarkable part, inasmuch as the development of the land-cultivation demanded by the increasing trade and commercial intercourse can be affected only by Chinese industry and perseverance. Manila has always been a favorite place for Chinese immigrants; and neither the hostility of the people, nor oppressing and prohibitory decrees for a long time by the Government, not even the repeated massacres, have been able to prevent their coming. The position of the Islands, south-east of two of the most important of the Chinese provinces, must necessarily have brought about a trade between the two countries very early, as ships can make the voyage in either direction with a moderate wind, as well in the south-west as the north-east monsoon. In a few old writers may even be found the assertion that the Philippine Islands were at one time subject to the dominion of China; and Father Gaubil (Lettres Edifiantes) mentions that Jaung-lo (of the Ming dynasty) maintained a fleet consisting of 30,000 men, which at different times proceeded to Manila. The presence of their ships as early as the arrival of Magellan in the extreme east of the archipelago, as well as the China plates and earthenware vessels discovered in the excavations, plainly show that the trade with China had extended far earlier to the most distant islands of the archipelago. It formed the chief support of the young Spanish colony, and, after the rise of the Encomiendas, was nearly the only source of its prosperity. It was feared that the junks would offer their cargoes to the Dutch if any obstacle was put in the way of their coming to Manila. The colony certain-

Early Chinese Associations.
ly could not maintain its position without the "Sangleys,"* who came annually in great numbers in the junks from China, and spread all over the country and in the towns as shopkeepers, artisans, gardeners, and fishermen; besides which, they were the only skillful and industrious workers, as the Filipinos under the priestly domination had forgotten altogether many trades in which they had engaged in former times. I take these facts from Morga.

In spite of all this, the Spaniards have, from the very commencement, endeavored rigorously to limit the number of the Chinese; who were then, as they are now, envied and hated by the natives for their industry, frugality, and cunning, by which means they soon became rich. They were an abomination, moreover, in the eyes of the priests as being irreclaimable heathens, whose example prevented the natives from making progress in the direction of Christianity; and the government feared them on account of the strong bond of union existing between them, and as being subjects of so powerful a nation, whose close proximity threatened the small body of Spaniards with destruction. $\dagger$ Fortunately for the latter, the Ming dynasty, which at that time was hastening to its downfall, did not think of conquest; but wickedly disposed powers which sprang into existence upon their downfall brought the colony into extreme danger.

[^174]In the attack of the noted pirate, Limahong, in 1574, they escaped destruction only by a miracle; and soon new dangers threatened them afresh. In 1603 a few mandarins came to Manila, under the pretence of ascertaining whether the ground about Cavite was really of gold. They were supposed to be spies, and it was concluded, from their peculiar mission, that an attack upon the colony was intended by the Chinese.

The archbishop and the priests incited the distrust which was felt against the numerous Chinese who were settled in Manila. Mutual hate and suspicion arose; both parties feared one another and prepared for hostilities. The Chinese commenced the attack; but the united forces of the Spaniards, being supported by the Japanese and the Filipinos, twenty-three thousand, according to other reports twenty-five thousand, of the Chinese were either killed or driven into the desert. When the news of this massacre reached China, a letter from the Royal Commissioners was sent to the Governor of Manila. That noteworthy document shows in so striking a manner how hollow the great government was at that time that I have given a literal translation of it at the end of this chapter.

After the extermination of the Chinese, food and all other necessaries of life were difficult to obtain on account of the utter unreliability of the natives for work; but by 1605 the number of Chinese* had again so increased that a decree was issued limiting them to six thousand, "these to be employed in the cultivation of the country;" while at the same time their rapid increase was taken advantage of by the captain-general for his own interest, as he exacted eight dollars from each Chinaman for permission to remain. In 1639 the Chinese population had risen to thirty thousand, according to other informa-

[^175]Limahong and
the Mandarins'
visit.

Early
massacre of Chinese.

Chinese laborers limited.

A nother massacre.

The pirate

Kog-seng.

Another expulsion.
tion, to forty thousand, when they revolted and were reduced to seven thousand. "The natives, who generally were so listless and indifferent, showed the utmost eagerness in assisting in the massacre of the Chinese, but more from hatred of this industrious people than from any feeling of friendship towards the Spaniards."*

The void occasioned by this massacre was soon filled up again by Chinese immigrants; and in 1662 the colony was once more menaced with a new and great danger, by the Chinese pirate Kog-seng, who had under his command between eighty and one hundred thousand men, and who already had dispossessed the Dutch of the Island of Formosa. He demanded the absolute submission of the Philippines; his sudden death, however, saved the colony, and occasioned a fresh outbreak of fury against the Chinese settlers in Manila, a great number of whom were butchered in their own "quarter" (ghetto). $\dagger$ Some dispersed and hid themselves; a few in their terror plunged into the water or hanged themselves; and a great number fled in small boats to Formosa. $\ddagger$

In 1709 the jealousy against the Chinese once more had reached such a height that they were accused of rebellion, and particularly of monopolizing the trades, and, with the exception of the most serviceable of the artisans and such of them as were employed by the Government, they were once again expelled. Spanish writers praise the salutariness of these measures; alleging that "under the pretence of agriculture the Chinese carry on trade; they are cunning and careful, making money and sending it to China, so that they defraud the Philippines annually of an enormous amount."

[^176]Sonnerat, however, complains that art, trade, and commerce had not recovered from these severe blows; though, he adds, fortunately the Chinese, in spite of prohibitory decrees, are returning through the corrupt connivance of the governor and officials.

To the present day they are blamed as being monopolists, particularly by the creoles; and certainly, by means of their steady industry and natural commercial aptitude, they have appropriated nearly all the retail trade to themselves. The sale of European imported goods is entirely in their hands; and the wholesale purchase of the produce of the country for export is divided between the natives, creoles, and the Chinese, the latter taking about one-half. Before this time only the natives and creoles were permitted to own ships for the purpose of forwarding the produce to Manila.

In 1757 the jealousy of the Spaniards broke out again in the form of a new order from Madrid, directing the expulsion of the Chinese; and in 1759 the decrees of banishment, which were repeatedly evaded, were carried into effect: but, as the private interests of the officials did not happen to coincide with those of the creole traders, the consequence was that "the Chinese soon streamed back again in incredible numbers," and made common cause with the English upon their invasion in 1762.* Thereupon, Sr. Anda commanded "that all the Chinese in the Philippine Islands should be hanged," which order was very generally carried out. $\dagger$ The last great Chinese massacre took place in 1819, when the aliens were suspected of having brought about the cholera by poisoning the wells. The greater part of the Europeans in Manila also fell victims to the fury of the populace, but the Spaniards generally were spared. The prejudice of the Spaniards, especially of the creoles, had

[^177]always been directed against the Chinese tradesmen, who interfered unpleasantly with the fleecing of the natives; and against this class in particular were the laws of limitation aimed. They would willingly have let them develop the country by farming but the hostility of the natives generally prevented this.

Expulsion of merchants from Manila.

Oppressive taxation.

A decree, issued in 1804, commanded all Chinese shopkeepers to leave Manila within eight days, only those who were married being allowed to keep shops; and their residence in the provinces was permitted only upon the condition that they confined themselves entirely to agriculture. Magistrates who allowed these to travel in their districts were fined $\$ 200$; the deputygovernor $\$ 25$; and the wretched Chinese were punished with from two to three years' confinement in irons.

In 1839 the penalties against the Chinese were somewhat mitigated, but those against the magistrates were still maintained on account of their venality. In 1843 Chinese ships were placed upon terms of equality with those of other foreign countries (Leg. Ult., II., 476). In 1850 Captain-General Urbiztondo endeavored to introduce Chinese colonial farming, and with this object promised a reduction of the taxes to all agricultural immigrants. Many Chinese availed themselves of this opportunity in order to escape the heavy poll-tax; but in general they soon betook themselves to trading once more.

Of late years the Chinese have not suffered from the terrible massacres which used formerly to overtake them; neither have theypuffered banishment; the officials being content to suppress their activity by means of heavy and oppressive taxes. For instance, at the end of 1867 the Chinese shopkeepers were annually taxed $\$ 60$ for permission to send their goods to the weekly market; this was in addition to a tax of from $\$ 12$ to $\$ 100$
on their occupations; and at the same time they were commanded thenceforth to keep their books in Spanish (English Consular Report, 1869).

The Chinese remain true to their customs and mode of living in the Philippines, as they do everywhere else. When they outwardly embrace Christianity, it is done merely to facilitate marriage, or from some motive conducive to their worldly advantage; and occasionally they renounce it, together with their wives in Manila, when about to return home to China. Very many of them, however, beget families, are excellent householders, and their children in time form the most enterprising, industrious, and wealthy portion of the resident population.

Invigorated by the severe struggle for existence which they have experienced in their over-populated country, the Chinese appear to preserve their capacity for labor perfectly unimpaired by any climate. No nation can equal them in contentedness, industry, perseverance, cunning, skill, and adroitness in trades and mercantile matters. When once they gain a footing, they generally appropriate the best part of the trade to themselves. In all parts of external India they have dislodged from every field of employment not only their native but, progressively, even their European competitors. Not less qualified and successful are they in the pursuance of agriculture than in trade. The emigration from the too thickly peopled empire of China has scarcely begun. As yet it is but a small stream, but it will by-and-by pour over all the tropical countries of the East in one mighty torrent, completely destroying all such minor obstacles as jealous interference and impotent precaution might interpose.

Over every section of remote India, in the South

Excellent element in population.

Formidable competitors.

Mongotian
vs. Caucasian
in Amerira.

Efficiency and reliability of Chinese labor.

America, the Chinese seem destined, in time, either to supplant every other element, or to found a mixed race upon which to stamp their individuality. In the Western States of the Union their number is rapidly on the increase; and the factories in California are worked entirely by them, achieving results that cannot be accomplished by European labor.

One of the most interesting of the many questions of large comprehensiveness which connect themselves with the penetration of the Mongolian race into America, which up till now it had been the fashion to regard as the inheritance of the Caucasians, is the relative capacity of labor possessed by both these two great races, who in the Western States of America have for the first time measured their mutual strength in friendly rivalry. Both are there represented in their most energetic individuality;* and every nerve will be strained in carrying on the struggle, inasmuch as no other country pays for labor at so high a rate.

The conditions, however, are not quite equal, as the law places certain obstacles in the way of the Chinese. The courts do not protect them sufficiently from insult, which at times is aggravated into malicious manslaughter through the ill-usage of the mob, who hate them bitterly

[^178]as being reserved, uncompanionable workers. Nevertheless, the Chinese immigrants take their stand firmly. The western division of the Pacific Railway has been chiefly built by the Chinese, who, according to the testimony of the engineers, surpass workmen of all other nationalities in diligence, sobriety, and good conduct. What they lack in physical power they make up for in perseverance and working intelligently together. The unique and nearly incredible performance that took place on April 28, 1869, when ten miles of railway track were laid in eleven working hours along a division of land which had in no way been prepared beforehand, was accomplished by Chinese workmen; and indeed only by them could it have been practicable.*

Of course, the superiority of the European in respect of the highest intellectual faculties is not for a moment to be doubted; but, in all branches of commercial life in which cleverness and perservering industry are necessary to success, the Chinese certainly appear entitled to the award. To us it appears that the influx of Chinese must certainly sooner or later kindle a struggle between capital and labor, in order to set a limit upon demands perceptibly growing beyond moderation.

The increasing Chinese immigration already intrudes upon the attention of American statesmen questions

Chinese cleverness and industry.

Chinese problem in America. of the utmost social and political importance. What influence will this entirely new and strange element

[^179]exercise over the conformation of American relations? Will the Chinese found a State in the States, or go into the Union on terms of political equality with the other citizens, and form a new race by alliance with the Caucasian element? These problems, which can only be touched upon here in a transitory form, have been dealt with in a masterly manner by Pumpelly, in his work Across America and Asia, published in London in 1870 .

Letter of the Commissary-General of Chinchew To Don Pedro De Acuña, Governor of the Philippines

To the powerful Captain-General of Luzon:
"Having been given to understand that the Chinese who proceeded to the kingdom of Luzon in order to buy and sell had been murdered by the Spaniards, I have investigated the motives for these massacres, and begged the Emperor to exercise justice upon those who had engaged in these abominable offences, with a view to security in the future.
"In former years, before my arrival here as royal commissioner, a Chinese merchant named Tioneg, together with three mandarins, went with the permission of the Emperor of China from Luzon to Cavite, for the purpose of prospecting for gold and silver; which appears to have been an excuse, for he found neither gold nor silver; I thereupon prayed the Emperor to punish this imposter Tioneg, thereby making patent the strict justice which is exercised in China.
"It was during the administration of the ex-Viceroy and Eunuchs that Tioneg and his companion, named Yanglion, uttered the untruth already stated; and subsequently I begged the Emperor to transmit all the papers bearing upon the matter, together with the minutes of Tioneg's accusation; when I myself examined the before-mentioned papers, and knew that everything that the accused Tioneg had said was utterly untrue.
"I wrote to the Emperor and stated that, on account of the untruth which Tioneg had been guilty of, the Castilians entertained the suspicion that he wished to make war upon them, and that they, under this idea, had murdered more than thirty thousand Chinese in Luzon. The Emperor, complying with my request, punished the accused Yanglion, though he omitted to put him to death; neither was Tioneg beheaded or confined in a cage. The Chinese people who had settled in Luzon were in no way to blame. I and others discussed this with the Emperor in order to ascertain what his pleasure was in this matter, as well as in another, namely, the arrival of two English ships on the coast of Chinchew (Fukien or Amoy district) - a very dangerous circumstance for China; and to obtain His Imperial Majesty's decision as to both these most serious matters.
"We also wrote to the Emperor that he should direct the punishment of both these Chinese; and, in acknowledging our communication, he replied to us, in respect to the English ships which had arrived in China, that in case they had come for the purpose of plundering, they should be immediately commanded to depart thence for Luzon; and, with regard to the Luzon difficulty, that the Castilians should be advised to give no credence to rogues and liars from China; and both the Chinese who had discovered the harbor to the English should be executed forthwith; and that in all other matters upon which we had written to him, our will should be his. Upon receipt of this message by usthe Viceroy, the Eunuch, and myself-we hereby send this our message to the Governor of Luzon, that his Excellency may know the greatness of the Emperor of China and of his Empire, for he is so powerful that he commands all upon which the sun and moon shine, and also that the Governor of Luzon may learn with what great wisdom this mighty empire is governed, and which power no one for many years has attempted to insult, although the Japanese have sought to disturb the tranquillity of Korea, which belongs to the Government of China. They did not succeed, but on the
contrary were driven out, and Korea has remained in perfect security and peace, which those in Luzon well know by report.
"Years ago, after we learnt that so many Chinese perished in Luzon on account of Tioneg's lies, many of us mandarins met together, and resolved to leave it to the consideration of the Emperor to take vengeance for so great a massacre; and we said as follows:-The country of Luzon is a wretched one, and of very little importance. It was at one time only the abode of devils and serpents; and only because (within the last few years) so large a number of Chinese went thither for the purpose of trading with the Castilians has it improved to such an extent; in which improvement the accused Sangleyes materially assisted by hard labor, the walls being raised by them, houses built, and gardens laid out, and other matters accomplished of the greatest use to the Castilians; and now the question is, why has no consideration been paid for these services, and these good offices acknowledged with thanks, without cruelly murdering so many people? And although we wrote to the King twice or thrice concerning the circumstances, he answered us that he was indignant about the before-mentioned occurrences, and said for three reasons it is not advisable to execute vengeance, nor to war against Luzon. The first is that for a long time till now the Castilians have been friends of the Chinese; the second, that no one can predict whether the Castilians or the Chinese would be victorious; and the third and last reason is, because those whom the Castilians have killed were wicked people, ungrateful to China, their native country, their elders, and their parents, as they have not returned to China now for very many years. These people, said the Emperor, he valued but little for the foregoing reasons; and he commanded the Viceroy, the Eunuch, and myself, to send this letter through those messengers, so that all in Luzon may know that the Emperor of China has a generous heart, great forbearance, and much mercy, in not declaring war against Luzon; and his justice is indeed manifest, as he has already punished the liar

Tioneg. Now, as the Spaniards are wise and intelligent, how does it happen that they are not sorry for having massacred so many people, feeling no repentance thereat, and also are not kinder to those of the Chinese who are still left? Then when the Castilians show a feeling of good-will, and the Chinese and Sangleyes who left after the dispute return, and the indebted money is repaid, and the property which was taken from the Sangleyes restored, then friendship will again exist between this empire and that, and every year tradingships shall come and go; but if not, then the Emperor will allow no trading, but on the contrary will at once command a thousand ships of war to be built, manned with soldiers and relations of the slain, and will, with the assistance of other peoples and kingdoms who pay tribute to China, wage relentless war, without quarter to any one; and upon its conclusion will present the kingdom of Luzon to those who do homage to China.
"This letter is written by the Visitor-General on the 12 th of the second month."

A contemporary letter of the Ruler of Japan forms a somewhat notable contrast:-

## Letter of Daifusama, Ruler of Japan <br> "To the Governor Don Pedro de Acuña, in the year 1605:

"I have received two letters from your Excellency, as also all the donations and presents described in the inventory. Amongst them was the wine made from grapes, which I enjoyed very much. In former years your Excellency requested that six ships might come here, and recently four, which request I have always complied with.
"But my great displeasure has been excited by the fact that of the four ships upon whose behalf your Excellency interposed, one from Antonio made the journey without my permission. This was a circumstance of great audacity, and a mark of disrespect to me. Does your Excellency wish to send that ship to Japan without my permission?
"Independently of this, your Excellency and others have many times discussed with me concerning the antecedents and interests of Japan, and many other matters, your requests respecting which I cannot comply with. This territory is called Xincoco, which means 'consecrated to Idols,' which have been honored with the highest reverence from the days of our ancestor until now, and whose actions I alone can neither undo nor destroy. Wherefore, it is in no way fitting that your laws should be promulgated and spread over Japan; and if, in consequence of these misunderstandings, your Excellency's friendship with the empire of Japan should cease, and with me likewise, it must be so, for I must do that which I think is right, and nothing which is contrary to my own pleasure.
"Finally, I have heard it frequently said, as a reproach, that many Japanese-wicked, corrupt men-go to your kingdom, remaining there many years, and then return to Japan. This complaint excites my anger, and therefore I must request your Excellency henceforth not to allow such persons to return in the ships which trade here. Concerning the remaining matters, I trust your Excellency will hereafter employ your judgment and circumspection in such a manner as to avoid incurring my displeasure for the future."

## XXVII

 and occupation.The Philippines were discovered by Magellan on the 16 th of March, 1521 -St. Lazarus' day.* But it was not until $1564, \dagger$ after many previous efforts had miscarried, that Legaspi, who left New Spain with five ships, took possession of the Archipelago in the name of Philip II. The discoverer had christened the islands after the sanctified Lazarus. This name, however,

[^180]never grew into general use; the Spaniards persistently calling them the Western Islands-Islas del Poniente; and the Portuguese, Islas del Oriente. Legaspi gave them their present name* in honor of Philip II, who, in his turn, conferred upon them the again extinct name of New Castile. $\dagger$ Legaspi first of all annexed Cebu, and then Panay; and six years later, in 1571, he first subdued Manila, which was at that time a village surrounded by palisades, and commenced forthwith the construction of a fortified town. The subjection of the remaining territory was effected so quickly that, upon the death of Legaspi (in August, 1572), all the western parts were in possession of the Spaniards. Numerous wild tribes in the interior, however. the Mahomedan states of Mindanao and the Sulu group, for example, have to this day preserved their independence. $\sim$ The character of the people, as well as their pglitical disposition, favored the occupancy. There was no mighty power, no old dynasty, no influential priestly domination to overcome, no traditions of national pride to suppress. The natives were either heathens, or recently proselytized superficially to Islamism, and lived under numerous petty chiefs, who ruled them despotically, made war upon one another, and were easily subdued. Such a community was called Barangay; and it forms to this day, though in a considerably modified form, the foundation of the constitutional laws. The Spaniards limited the power of the petty chiefs, upheld slavery, and abolished hereditary nobility and dignity, substituting in its place an aristocracy created by themselves for services rendered to the State; but they carried out all these changes very grad-

[^181]Unthinking policy of greed.

High character of early administrators.
ually and cautiously.* The old usages and laws, so long as they did not interfere with the natural course of government, remained untouched and were operative by legal sanction; and even in criminal matters their validity was equal to those emanating from the Spanish courts. To this day the chiefs of Barangay, with the exception of those bearing the title of "Don," have no privileges save exemption from the poll-tax and socage service. They are virtually tax-collectors, excepting that they are not paid for such service, and their private means are made responsible for any deficit. The prudence of such a measure might well be doubted, without regard to the fact that it tempts the chiefs to embezzlement and extortion; and it must alienate a class of natives who would otherwise be a support to the Government.

Since the measures adopted in alleviation of the conquest and occupancy succeeded in so remarkable a man-

[^182]ner, the governors and their subordinates of those days, at a time when Spain was powerful and chivalrous, naturally appear to have been distinguished for wisdom and high spirit. Legaspi possessed both qualities in a marked degree. Hardy adventurers were tempted there, as in America, by privileges and inducements which power afforded them; as well as by the hope, which, fortunately for the country, was never realized, of its being rich in auriferous deposits. In Luzon, for instance, Hernando Riquel stated that there were many goldmines in several places which were seen by the Spaniards; "the ore is so rich that I will not write any more about it, as I might possibly come under a suspicion of exaggerating; but I swear by Christ that there is more gold on this island than there is iron in all Biscay." They received no pay from the kingdom; but a formal right was given them to profit by any territory which was brought into subjection by them. Some of these expeditions in search of conquest were enterprises undertaken for private gain, others for the benefit of the governor; and such service was rewarded by him with grants of lands, carrying an annuity, offices, and other benefits (encomiendas, oficios $y$ aprovechamientos). The grants were at first made for three generations (in New Spain for four), but were very soon limited to two; when De los Rios pointed this out as being a measure very prejudicial to the Crown, "since they were little prepared to serve his Majesty, as their grand-children had fallen into the most extreme poverty." After the death of the feoffee the grant reverted to the State; and the governor thereupon disposed of it anew.

The whole country at the outset was completely divided into these livings, the defraying of which formed by far the largest portion of the expenses of the kingdom. Investitures of a similar nature existed, more or less,

Conquerors on commission.

The feudal "encomiendas."
in a territory of considerable extent, the inhabitants of which had to pay tribute to the feoffee; and this tribute had to be raised out of agricultural produce, the value of which was fixed by the feudal lord at a very low rate, but sold by him to the Chinese at a considerable profit. The feudal lords, moreover, were not satisfied with these receipts, but held the natives in a state of slavery, until forbidden by a Bull of Pope Gregory XIV, dated April 18, 1591. Kafir and negro slaves, whom the Portuguese imported by way of India, were, however, still permitted.

The original holders of feudal tenures amassed considerable booty therefrom. Zuñiga relates that as early as the time of Lavezares, who was provisional governor between 1572 and 1575, he visited the Bisayas and checked the covetousness of the encomenderos, so that at least during his rule they relaxed their system of extortion. Towards the end of Sande's government (1575-80) a furious quarrel broke out between the priests and the encomenderos; the first preached against the oppression of the latter, and memorialized Philip II thereon. The king commanded that the natives should be protected, as the extortionate greed of the feudal chiefs had exceeded all bounds; and the natives were then at liberty to pay their tribute either in money or in kind. The result of this well-intentioned regulation appears to have produced a greater assiduity both in agriculture and trade, "as the natives preferred to work without coercion, not on account of extreme want."

Salcedo " most illustrious of the conquerors." And here.I may briefly refer to the achievements of Juan de Salcedo, the most illustrious of all the conquerors. Supported by his grandfather, Legaspi, with forty-five Spanish soldiers, he fitted out an expedition at his own expense, embarked at Manila, in May, 1572, examined all parts of the west coast of the island, landed
in all the bays which were accessible to his light-draught ships, and was well received by the natives at most of the places. He generally found great opposition in penetrating into the interior; yet he succeeded in subduing many of the inland tribes; and when he reached Cape Bojeador, the north-west point of Luzon, the extensive territory which at present forms the provinces of Zambales, Pangasinan, and Ilocos Norte and Sur, acknowledged the Spanish rule. The exhaustion of his soldiers obliged Salcedo to return. In Vigan, the present capital of Ilocos Sur, he constructed a fort, and left therein for its protection his lieutenant and twenty-five men, while he himself returned, accompanied only by seventeen soldiers, in three small vessels. In this manner he reached the Cagayan River, and proceeded up it until forced by the great number of hostile natives to retreat to the sea. Pursuing the voyage to the east coast, he came down in course of time to Paracale, where he embarked in a boat for Manila, was capsized, and rescued from drowning by some passing natives.

In the meantime Legaspi had died, and Lavezares
"The Cortes of the
Philippines." was provisionally carrying on the government. Salcedo heard of this with vexation at being passed over; but, when he recovered from his jealousy, he was entrusted with the subjugation of Camarines, which he accomplished in a short time. In 1574 he returned to Ilocos, in order to distribute annuities among his soldiers, and to receive his own share. While still employed upon the building of Vigan, he discovered the fleet of the notorious Chinese pirate, Limahong, who, bent upon taking possession of the colony, was then passing that part of the coast with sixty-two ships and a large number of soldiers. He hastened at once, with all the help which he could summon together in the neighborhood, to Manila, where he was nominated to the command of the troops, in the

Commercial importance of early Manila.

Spain and Portugal uniled.

Manila as capital of a rast empire.
place of the already deposed master of the forces; and he drove the Chinese from the town, which they had destroyed. They then withdrew to Pangasinan, and Salcedo burnt their fleet; which exploit was achieved with very great difficulty. In 1576 this Cortes of the Philippines died.*

Apart from the priests, the first-comers consisted only of officials, soldiers, and sailors; and to them, naturally, fell all the high profits of the China trade. Manila was their chief market, and it also attracted a great portion of the external Indian trade, which the Portuguese had frightened away from Malacca by their excessive cruelty. The Portuguese, it is true, still remained in Macao and the Moluccas: but they wanted those remittances which were almost exclusively sought after by the Chinese, viz., the silver which Manila received from New Spain.

In 1580 Portugal, together with all its colonies, was handed over to the Spanish Crown; and the period extending from this event to the decay of Portugal (1580-1640) witnessed the Philippines at the height of their power and prosperity.

The Governor of Manila ruled over a part of Mindanao, Sulu, the Moluccas, Formosa, and the original Portuguese possessions in Malacca and India. "All that lies between Cape Singapore and Japan is subject to Luzon; their ships cross the ocean to China and New Spain, and drive so magnificent a trade that, if it were only free, it would be the most extraordinary that the world could show. It is incredible what glory these islands confer upon Spain: The Governor of the Philippines treats with the Kings of Cambodia, Japan, China. The first is his ally, the last his friend; and the same with Japan. He declares war or peace, without waiting for the com-

[^183]mand from distant Spain."* But the Dutch had now Dutch begun the struggle, which they managed to carry on opposition. against Philip II in every corner of the world; and even in 1610 De Los Rios complained that he found the country very much altered through the progress and advance made by the Dutch; also that the Moros of Mindanao and Sulu, feeling that they were supported by Holland, were continually in a state of discontent.

The downfall of Portugal occasioned the loss of her colonies once more. Spanish policy, the government of

Decline of colony.

Philippine history unimportant and unsatisfactory.

Undesirable emigrants from Spain. later to these outlying possessions, consisting generally as they did of the very dregs of the nation, were seized with an intense feeling of selfishness; and frauds and peculations were the natural sequence. The Spanish writers are full of descriptions of the wretched state of society then existing, which it is unnecessary to repeat here.

The colony had scarcely been molested by external enemies, with the exception of pirates. In the earliest

[^184]time the Dutch had engaged occasionally in attacks on the Bisayas. But in 1762 (during the war of the Bourbon succession) an English fleet suddenly appeared before Manila, and took the surprised town without any difficulty. The Chinese allied themselves with the English. A great insurrection broke out among the Filipinos, and the colony, under the provisional government of a feeble archbishop, was for a time in great danger. It was reserved for other dignitaries of the Church and Anda, an energetic patriot, to inflame the natives against the foreigners; and the opposition incited by the zealousness of the priests grew to such an extent that the English, who were confined in the town, were actually glad to be able to retreat. In the following year the news arrived from Europe of the conclusion of peace; but in the interval this insurrection, brought about by the invasion, had rapidly and considerably extended; and it was not suppressed until 1765 , when the work was accomplished by creating enmity among the different tribes.* But this was not done without a loss to the province of Ilocos of two hundred sixty-nine thousand two hundred and seventy persons-half of the population, as represented by Zuñiga.

Many minor uprisings from local grievances.

Severity and want of tact on the part of the Government and their instruments, as well as bigoted dissensions, have caused many revolts of the natives; yet none, it is true, of any great danger to the Spanish rule. The discontent has always been confined to a single district, as the natives do not form a united nation; neither the bond of a common speech nor a general interest binding the different tribes together. The state communications and laws among them scarcely reach beyond the borders of the villages and their dependencies.

[^185]A consideration of far more importance to the distant metropolis than the condition of the constantly excited natives, who are politically divided among themselves, and really have no steady object in view, is the attitude of the mestizos and creoles, whose discontent increases in proportion to their numbers and prosperity. The military revolt which broke out in 1823, the leaders of which were two creoles, might easily have terminated fatally for Spain. The latest of all the risings of the mestizos seems to have been the most dangerous, not only to the Spanish power, but to all the European population. *

On the 20th of January, 1872, between eight and nine
Danger from mestizos and crooles. in the evening, the artillery, marines, and the garrison mutiny. of the arsenal revolted in Cavite, the naval base of the Philippines, and murdered their officers; and a lieutenant who endeavored to carry the intelligence to Manila fell into the hands of a crowd of natives. The news therefore did not reach the capital until the next morning, when all the available troops were at once dispatched, and, after a heavy preliminary struggle, they succeeded the following day in storming the citadel. A dreadful slaughter of the rebels ensued. Not a soul escaped. Among them was not a single European; but there were many mestizos, of whom several were priests and lawyers. Though perhaps the first accounts, written under the influence of terror, may have exaggerated many particulars, yet both official and private letters agree in describing the conspiracy as being'long contemplated, widely spread, and well planned. The whole fleet and a large number of troops were absent at the time, engaged in the expedition against Sulu.

[^186]A portion of the garrison of Manila were to rise at the same time as the revolt in Cavite, and thousands of natives were to precipitate themselves on the caras blancas (pale faces), and murder them. The failure of the conspiracy was, it appears, only attributable to a fortunate accident-to the circumstance, namely, that a body of the rebels mistook some rocket fired upon the occasion of a Church festival for the agreed signal, and commenced the attack too soon.*

Credit due Spain.

Friars an important factor.
Their defects have worked out for good.

Let me be permitted, in conclusion, to bring together a few observations which have been scattered through the text, touching the relations of the Philippines with foreign countries, and briefly speculate thereon.

Credit is certainly due to Spain for having bettered the condition of a people who, though comparatively speaking highly civilized, yet being continually distracted by petty wars, had sunk into a disordered and uncultivated state. The inhabitants of these beautiful islands, upon the whole, may well be considered to have lived as comfortably during the last hundred years, protected from all external enemies and governed by mild laws, as those of any other tropical country under native or European sway,-owing, in some measure, to the frequently discussed peculiar circumstances which protect the interests of the natives.

The friars, also, have certainly had an essential part in the production of the results.

Sprung from the lowest orders, inured to hardship and want, and on terms of the closest intimacy with the natives, they were peculiarly fitted to introduce them to a practical conformity with the new religion and code of morality. Later on, also, when they possessed rich

[^187]livings, and their devout and zealous interest in the welfare of the masses relaxed in proportion as their incomes increased, they materially assisted in bringing about the circumstances already described, with their favorable and unfavorable aspects. Further, possessing neither family nor good education, they were disposed to associate themselves intimately with the natives and their requirements; and their arrogant opposition to the temporal power generally arose through their connection with the natives. With the altered condition of things, however, all this has disappeared. The colony can no longer be kept secluded from the world. Every facility afforded for commercial intercourse is a blow to the old system, and a great step made in the direction of broad and liberal reforms. The more foreign capital and foreign ideas and customs are introduced, increasing the prosperity, enlightenment, and self-respect of the population, the more impatiently will the existing evils be endured.

England can and does open her possessions unconcernedly to the world. The British colonies are united to the mother country by the bond of mutual advantage, viz. the production of raw material by means of English capital, and the exchange of the same for English manufactures. The wealth of England is so great, the organization of her commerce with the world so complete, that nearly all the foreigners even in the British possessions are for the most part agents for English business houses, which would scarcely be affected, at least to any marked extent, by a political dismemberment. It is entirely different with Spain, which possesses the colony as an inherited property, and without the power of turning it to any useful account.

Government monopolies rigorously maintained, Menaces to insolent disregard and neglect of the mestizos and power-

Contrast with English .: cotonies.
ful creoles, and the example of the United States, were the chief reasons of the downfall of the American possessions. The same causes threaten ruin to the Philippines: but of the monopolies I have said enough.

Growing American Enfluence.

Powerful neighbors.

China and America.

Mestizos and creoles, it is true, are not, as they formerly were in America, excluded from all official appointments; but they feel deeply hurt and injured through the crowds of place-hunters which the frequent changes of ministries send to Manila. The influence, also, of the American element is at least visible on the horizon, and will be more noticeable when the relations increase between the two countries. At present they are very slender. The trade in the meantime follows in its old channels to England and to the Atlantic ports of the United States. Nevertheless, whoever desires to form an opinion upon the future history of the Philippines, must not consider simply their relations to Spain, but must have regard to the prodigious changes which a few decades produce on either side of our planet.
For the first time in the history of the world the mighty powers on both sides of the ocean have commenced to enter upon a direct intercourse with one another-Russia, which alone is larger than any two other parts of the earth; China, which contains within its own boundaries a third of the population of the world; and America, with ground under cultivation nearly sufficient to feed treble the total population of the earth. Russia's future role in the Pacific Ocean is not to be estimated at present.
The trade between the two other great powers will therefore be presumably all the heavier, as the rectification of the pressing need of human labor on the one side, and of the corresponding overplus on the other, will fall to them.

The world of the ancients was confined to the shores of the Mediterranean; and the Atlantic and Indian

Nenring predominance of the Pacific. Oceans sufficed at one time for our traffic. When first the shores of the Pacific re-echoed with the sounds of active commerce, the trade of the world and the history of the world may be really said to have begun. A start in that direction has been made; whereas not so very long ago the immense ocean was one wide waste of waters, traversed from both points only once a year. From 1603 to 1769 scarcely a ship had ever visited California, that wonderful country which, twenty-five years ago, with the exception of a few places on the coast, was an unknown wilderness, but which is now covered with flourishing and prosperous towns and cities, served by a sea-to-sea railway, and its capital already ranking the third of the seaports of the Union; even at this early stage of its existence a central point of the world's commerce, and apparently destined, by the proposed junction of the great oceans, to play a most important part in the future.

In proportion as the navigation of the west coast of America extends the influence of the American element over the South Sea, the captivating, magic power which the great republic exercises over the Spanish colonies* will not fail to make itself felt also in the Philippines. The Americans are evidently destined to bring to a full development the germs originated by the Spaniards. As conquerors of modern times, representing the age of free citizens in contrast to the age of knighthood,

[^188]they follow with the plow and the axe of the pioneer, where the former advanced under the sign of the cross with their swords.

Superiority over Spanish system.

Need of gradual Philippine awakening.

A considerable portion of Spanish-America already belongs to the United States, and has since attained an importance which could not possibly have been anticipated either under the Spanish Government or during the anarchy which followed. With regard to permanence, the Spanish system cannot for a moment be compared with that of America. While each of the colonies, in order to favor a privileged class by immediate gains, exhausted still more the already enfeebled population of the metropolis by the withdrawal of the best of its ability, America, on the contrary, has attracted to itself from all countries the most energetic element, which, once on its soil and, freed from all fetters, restlessly progressing, has extended its power and influence still further and further. The Philippines will escape the action of the two great neighboring powers all the less for the fact that neither they nor their metropolis find their condition of a stable and well-balanced nature.

It seems to be desirable for the Filipinos that the above-mentioned views should not speedily become accomplished facts, because their education and training hitherto have not been of a nature to prepare them successfully to compete with either of the other two energetic, creative, and progressive nations. They have, in truth, dreamed away their best days.

## STATE OF THE PHILIPPINES IN 1810

## By Tomas de Comyn

The enumeration of the natives for the assessment of tributes, in the manner ordained by the standing regulations of the Intendants of New Spain, is not observed in the Philippine Islands; nor indeed would this be an easy task. The wide extent of the twentyseven provinces of which they are composed, scattered, as they are, through the great space comprehended between the southern part of Mindanao, and the almost desert islands known by the name of Batanes and Babuyanes, to the north of that of Luzon, presents almost insurmountable obstacles, and in some measure affords an excuse for the omission. Among these obstacles may be mentioned the necessity of waiting for the favorable monsoon to set in, in order to perform the several voyages from one island to the other; the encumbered state of the grounds in many parts, the irregular and scattered situations of the settlements and dwellings, the variety among the natives and their dialects, the imperfect knowledge hitherto obtained of the respective limits and extent of many districts, the general want of guides and auxiliaries, on whom reliance can be placed, and, above all, the extreme repugnance the natives evince to the payment of tributes, a circumstance which induces them to resort to all kinds of stratagems, in order to elude the vigilance of the collectors, and conceal their real numbers.

The quinquennial census, as regularly enjoined, being thus found impracticable, no other means are left than to deduce from the annual lists, transmitted by the district magistrates to the superintendent's office, and those formed by the parish curates, a prudent estimate of the total number of inhabitants subject to our laws and religion; yet these data, although the only ones, and also the most accurate it is possible to obtain, for this reason, inspire so little confidence, that it is necessary to use them with great caution. It is evident that all the district magistrates and curates do not possess the same degree of care and minuteness in a research so important, and the omission or connivance of their respective delegates, more or less general, renders it probable that the number of tributes, not included in the annual returns, is very considerable. If to this we add the legal exemptions from tribute, justly granted to various
individuals for a certain number of years, or during the performance of special service, we shall easily be convinced of the imperfection of results, derived from such insecure principles. * * * I have carefully formed my estimates corresponding to the year 1810, and by confronting them with such data as I possess relating to the population of 1791, I have deduced the consoling assurance that, under a parity of circumstances, the population of these Islands, far from having diminished, has, in the interval, greatly increased.

From the collective returns recently made out by the district

Ratio to tributes.

Foreigners and wild tribes. magistrates, it would appear that the total number of tributes amounts to 386,654 , which multiplied by six and one-half produces the sum of $2,515,406$, at which I estimate the total population, including old men, women and children. I ought here to observe, that I have chosen this medium of six and one-half between the five persons estimated in Spain and eight in the Indies, as constituting each family, or entire tribute; for although the prodigious fecundity of the women in the latter hemisphere, and the facility of maintaining their numerous offspring, both the effects of the benignity of the climate and their sober way of living, sufficiently warrant the conclusion, that a greater number of persons enter into the composition of each family, I have, in this case, been induced to pay deference to the observations of religious persons, intrusted with the care of souls, who have assured me that, whether it be owing to the great mortality prevailing among children, or the influence of other local causes, in many districts each family, or entire tribute, does not exceed four and one-half persons.

To the above amount it is necessary to add 7,000 Sangleys (Chinese), who have been enumerated and subjected to tribute, for, although in the returns preserved in the public offices, they are not rated at more than 4,700, there are ample reasons for concluding, that many who are wandering about, or hidden in the provinces, have eluded the general census. The European Spaniards, and Spanish creoles and mestizos, do not exceed 4,000 persons, of both sexes and all ages, and the distinct castes or modifications known in America under the name of mulattos, quadroons, etc., although found in the Philippine Islands, are generally confounded in the three classes of pure natives, Chinese mestizos, and Chinese. Besides the above distinctions, various infidel and independent nations or tribes exist, more or less savage and ferocious, who have their dwellings in the woods and glens, and are distinguished by the respective names of Aetas, Ingolots, Negrillos, Igorots, Tinguianes, etc., nor is there scarcely a province in Luzon, that does not give shelter_to
some of those isolated tribes, who inhabit and possess many of the mountainous ranges, which ramificate and divide the wide and extended plains of that beautiful island.

The original race by which the Philippines are peopled, is beyond doubt Malayan, and the same that is observed in Sumatra, Java, Borneo, and the other islands of this immense archipelago. The Philippine Islanders, very different from the Malabars, whose features possess great regularity, sweetness, and even beauty, only resemble the latter in color, although they excel them in stature, and the good proportion of their limbs. The local population of the capital, in consequence of its continual communication with the Chinese and other Asiatics, with the mariners of various nations, with the soldiery and Mexican convicts, who are generally mulattos, and in considerable numbers sent to the Islands yearly in the way of transportation, has become a mixture of all kinds of nations and features, or rather a degeneration from the primitive races.

Manila, the capital of the Philippine Islands, at present contains a population of from one hundred forty to one hundred fifty thousand inhabitants, of all classes; but it ought, however, to be understood, that in this computation are included the populous suburbs of Santa Cruz, San Fernando, Binondo, Tondo, Quiapo, San Sebastian, San Anton, and Sampaloc; for although each is considered as a distinct town, having a separate curate, and civil magistrate of its own, the subsequent union that has taken place rather makes them appear as a prolongation of the city, divided into so many wards and parishes, in the center of which their respective churches are built. Among the chief provincial towns, several are found to contain a population of from twenty to thirty thousand souls, and many not less than ten to twelve thousand. Finally, it is a generally received opinion that, besides the Moros and independent tribes, the total population of the Philippine Islands, subject to the authority of the king, is equal to three millions.

Among the varied productions of the Philippines, for many reasons, none is so deserving of attention as cotton. Its whiteness and fine staple give to it such a superiority over that of the rest of Asia, and possibly of the world, that the Chinese anxiously seek it, in order preferably to employ it in their most perfect textures, and purchase it thirty per cent dearer than the best from British India. Notwithstanding this extraordinary allurement, the vicinity of a good market, and the positive certainty that, however great the exportation, the growth can never equal the consumption and im-

Manela's population.

Cotton.
mense demand for this article, it has, nevertheless, hitherto been found impossible to extend and improve its cultivation, in such a way as to render it a staple commodity of the country. Owing to this lamentable neglect, is it, that the annual exportation does not exceed five thousand "arrobas" ( $125,000 \mathrm{lbs}$.) whereas the British import into China at the annual rate of 100,000 bales, or $1,200,000$ "arrobas," produced in their establishments at Bombay and Calcutta, and which, sold at the medium price of fifteen "taels," for one hundred thirty pounds, yield the net amount of $\$ 4,800,000$.

Its advantayes.

Restricted cultivation.

Indigo. is the more to be regretted, as the Islands abound in situations peculiarly adapted for the cultivation of cotton, and the accidental failure of the crops in some provinces, might easily be made up by their success in others. The culture of this plant is besides extremely easy, as it requires no other labor than clearing the grounds from brush-wood, and lightly turning up the earth with a plough, before the seeds are scattered, which being done, the planter leaves the crop to its own chance, and in five months gathers abundant fruit, if, at the time the bud opens, it is not burnt by the north winds, or rotted with unseasonable showers.

The provinces of Ilocos and Batangas are the only ones in which the cultivation of cotton is pursued with any degree of zeal and care, and it greatly tends to enrich the inhabitants. This successful example has not, however, hitherto excited emulation in those of the other provinces; and thus the only production of the Philippine Islands, of which the excellence and superior demand in trade are as well known as its culture is easy, owing to strange fatality and causes which will be hereafter noticed, is left almost in a neglected state, or, at most, confined to the narrow limits of local consumption.

Pangasinan, Pampanga, Bataan, La Laguna, Tayabas and Camarines produce indigo of various classes, and, although its preparation or the extraction of the dye, is in most of the above provinces still performed in an equally imperfect manner, several small improvements have recently been made, which have bettered the quality, more particularly in La Laguna, the only district in which attempts have been made to imitate the process used in Guatemala, as well with regard to the construction and number of vats necessary, as the precipitation of the coloring particles-detached from the plant by the agitation of the water. In the other places, the whole of the operations are performed in a single vat, and the indigo obtained is not unfrequently impregnated with lime and other extraneous substances.

[^189]unequal pace of a "carabao," a species of ox or buffalo, peculiar to this and other Asiatic countries. The juice is conveyed to an iron caldron, and in this the other operations of boiling, skimming and cleansing take place, till the crystallization or adhering of the sugar is completed. All these distinct parts of the process, in other colonies, are performed in four separate vessels, confided to different hands, and consequently experience a much greater degree of care and dexterity. After being properly clayed, the sugars acquire such a state of consistency that, when shipped in canvas bags, they become almost petrified in the course of the voyage, without moistening or purging, as I understand is the case with those of Bengal.

The Society gave the first impulse to this laudable project, and then the governor of the Islands, Don José Basco, anxious to realize it, with this view sent Colonel Charles Conely on a special commission to the province of Camarines. This zealous officer and district magistrate, in the years $1786-1788$ caused $4,485,782$ mulberry trees to be planted in the thirty districts under his jurisdiction; and incalculable are the happy results which would have attended a plan so extensive, and commenced with so much vigor, if it could have been continued with the same zeal by his successor, and not at once destroyed, through a mistaken notion of humanity, with which, soon after the departure of Governor Basco, they proceeded to exonerate the Filipinos from all agricultural labor that was not free and spontaneous, in conformity, as was then alleged, to the general spirit of our Indian legislation. As it was natural to expect, the total abandonment of this valuable branch followed a measure so fatal, and notwithstanding the efforts subsequently made by the Royal Company, in order to obtain its restoration, as well in Camarines
as the Province of Tondo, all their exertions were in vain, though it must be allowed that at the time several untoward circumstances contributed to thwart their anxious wishes. Notwithstanding this failure, the project, far from being deemed impracticable, would beyond all doubt succeed, and, under powerful patronage, completely answer the well-founded hopes of its original conceivers and promoters. The natives themselves would soon be convinced of the advantages to be derived from the possession of an article, in so many ways applicable to their own fine textures, and besides the variety of districts in the Islands, proved to be suitable to the cultivation of this interesting tree, it is a known fact that many of the old mulberry groves are still in existence.

The Bisayas, Cagayan, and many other provinces, produce wax in considerable abundance, which the Indians collect from the natural hives formed in the cavities of the trees, and it is also brought down by the infidel natives from the mountains to the neighboring towns. The quality certainly is not the best, and notwithstanding attempts have been made to cleanse it from the extraneous particles with which it is mixed, it always leaves a considerable sediment on the lower part of the cakes, and never acquires an entire whiteness. Its consumption is great, especially in the capital, and after supplying the wants of the country, an annual surplus of from six hundred to eight hundred quintals is appropriated for exportation.

This certainly might be converted into an article of extreme importance, especially for the kingdom of Peru, which in peaceable times receives its supplies from Spain, and even from the Island of Cuba; but for this purpose it would be necessary to adopt the plan recommended by the enlighiened zeal of the Patriotic Society and previously encourage the establish ent of arti icial hives and the plantation of aromatic and flowering shrubs, which so easily attract and secure the permanency of the roving swarms, always ready to undertake fresh labors. This, as well as many other points, has hitherto been entirely overlooked.

The production is cultivated in the Provinces of Tayabas, Black pepper. Batangas, and La Laguna, but in such small quantities, that, notwithstanding the powerful allurements of all kinds constantly held out by the Royal Company during the long period of twenty years, their agents have never been able to collect in more than about 64,000 lbs. annually. After every encouragement, the most that has been attained with the natives, is confined to their planting in some districts fifty to one hundred pepper-vines round their huts,
which they cultivate in the same way as they would plots of flowers, but without any other labor than supporting the plant with a proportioned stake, clearing the ground from weeds, and attending to daily irrigation.

Not popular.

This article therefore scarcely deserves a place amongst the flourishing branches of agriculture, at least till it has been raised from its present depressed state, and the grounds laid out in regular and productive pepper-groves. Till this is done, to a corresponding extent, it must also be excluded from the number of productions furnished by these Islands to commerce and exportation; more particularly if we consider that, notwithstanding the great fragrance of the grain, as well as its general superiority over the rest of Asia, so great a difference exists in the actual price, that this can never be compensated by its greater request in the markets of Europe, and much less enable it to compete with that of the British and Dutch, till its abundance has considerably lowered its primitive value.

Finally, although an infinity of grounds are to be found adapted to the rapid propagation of pepper-vines, as may easily be inferred from the analogy and proximity of the Philippine Islands to the others of this same archipelago, so well known for their growth of spices, it must be confessed that it is a species of culture by no means popular among the Philippine natives, and it would be almost requiring too much from their inconstancy of character, to wish them to dedicate their lands and time to the raising of a production which, besides demanding considerable care, is greatly exposed to injury, and even liable to be destroyed by the severity of the storms, which frequently mark the seasons. With difficulty would they be induced to wait five years before they were able to gather the uncertain fruits of their labor and patience. If, therefore, it should ever be deemed a measure of policy to encourage the growth of black pepper, it will be necessary for the government to order the commons belonging to each town, and adapted to this species of plantation, to be appropriated to this use, by imposing on the inhabitants the obligation of taking care of them, and drawing from the respective coffers of each community the necessary funds for the payment of the laborers, and the other expenses of cultivation. If this cannot be done, it will be necessary to wait till the general condition of the country is improved, when through the spirit of emulation, and the enterprises of the planters being duly patronized and supported, present difficulties may be overcome, and the progressive results of future attempts will be then found to combine the interests of individuals with the general welfars. of the colony.

So choice is the quality of the coffee produced in the Island of Coffer. Luzon, especially in the districts of Indang and Silang, in the province of Cavite, that if it is not equal to that of Mocha, $I$ at least consider it on parallel with the coffee of Bourbon; but, as the consumption and cultivation are extremely limited, it cannot with any propriety be yet numbered among the articles contributing to the export-trade.

Cocoa is something more attended to, in consequence of the use of chocolate being greatly extended among the natives of easy circumstances. That of the Island of Cebu, is esteemed superior to the cocoa of Guayaquil, and possibly it is not excelled by that of Soconusco. As, however, the quantity raised does not suffice for the local consumption, Guayaquil cocoa meets a ready sale, and is generally brought in return-cargo by the ships coming from Acapulco, and those belonging to the Philippine company dispatched from Callao, the shipping port of Lima.

The cultivation of these two articles in the Philippines is on the same footing as that of pepper, which, as above stated, is rather an object of luxury and recreation than one of speculation among the Filipinos. The observations and rules pointed out in the preceding article, are, in a general sense, applicable to both these branches of industry.

Cinnamon groves, or trees of wild cinnamon, are to be found in every province. In Mindanao, a Dutchman, some years ago, was employed by orders of the government, in examining the forests and making experiments, with a view to discover the same tree of this species that has given so much renown to Ceylon; but, whether it was owing to a failure in the discovery, or, when the plant was found, as at the time was said to be the case, the same results were not produced, from the want of skill in preparing, or stripping off the bark; certain it is, that the laudable attempt totally failed, or rather the only advantage gained, has been the extracting from the bark and more tender parts of the branches of the tree, an oil or essence of cinnamon, vigorous and aromatic in the extreme.

About the same time, a land-owner of the name Salgado, undertook to form an extensive plantation of the same species in the province of La Laguna, and succeeded in seeing upwards of a million cinnamon trees thrive and grow to a considerable size; but at last, he was reluctantly compelled to desist from his enterprise, by the same reasons which led to the failure of Mindanao.

[^190]Nutmeg.

Rice.

High yield.

These facts are of sufficient authority for our placing the cinnamon tree among the indigenous productions of the Philippine Islands and considering their general excellence above those of the same nature in the rest of Asia, it may reasonably be concluded that, without the tree being identically the same, the cinnamon with which it is clothed will be found finer than that yielded by the native plant of the Island of Ceylon, and this circumstance, consequently, holds out a hope that, in the course of time, it may become an article of traffic, as estimable as it would be new. In order, however, that this flattering prospect may be realized, it will be requisite for the government to procure some families, or persons from the above island, acquainted with the process of stripping off the bark and preparing the cinnamon, by dexterously offering allurements, corresponding to the importance of the service, which, although in itself it may probably be an extremely simple operation, as long as it is unknown, will be an insuperable obstacle to the propagation of so important an agricultural pursuit.

Two species of nutmeg are known here, the one in shape resembling a pigeon's egg, and the other of a perfectly spherical form; but both are wild and little aromatic, and consequently held in no great esteem.

Rice is the bread and principal aliment of these natives, for which reason, although its cultivation is among the most disagreeable departments of husbandry, they devote themselves to it with astonishing constancy and alacrity, so as to form a complete contrast with their characteristic indifference in most other respects. This must, however, be taken as a certain indication of the possibility of training them up to useful labor; whenever they can be led on in a proper manner.

The earth corresponds with surprising fertility to the labors of the Filipino, rewarding him, in the good seasons, with ninety, and even as high as one hundred per cent; a fact I have fully ascertained and of which I besides possess undoubted proofs, obtained from the parish-curates of La Pampanga. As, however, the provinces are frequently visited with dreadful hurricanes (called in the country, baguios), desolated by locusts, and exposed to the effects of the great irregularities of nature, which, in these climes, often acts in extreme, the crops of this grain are precarious, or at least, no reliance can be placed on a certain surplus allowing an annual exportation to China. On this account, rice cannot be placed in the list of those articles which give support to the external trade.

The "sibucao," or logwood, and ebony, in both which these islands abound, are the only woods in any tolerable request. The first is sold with advantage in Bengal, and the other meets a ready sale in the ports of China, in the absence of that brought from the Island of Bourbon, which is a quality infinitely superior. Both are, however, articles of no great consumption, for, being bulky and possessing little intrinsic value, they will not bear the high charges of freight and other expenses, attendant on the navigation of the Asiatic seas, and can only suit the shipper, as cargo, who is anxious not to return to the above countries in ballast. Hence, as an object of export trade, these articles cannot be estimated at more than $\$ 30,000$ per annum.

I deem it superfluous to dwell on a multitude of other good and even precious woods in timber, with which the Philippine Islands are gifted, because this is a subject already suficiently well understood, and a complete collection of specimens, as well as some large blocks, were besides transmitted some years ago to the king's dockyard. It may, however, be proper to remark, that the establishment near the capital for shipbuilding and masts, are much more expensive than is generally supposed, as well on account of the difficulties experienced in dragging the trees from the interior of the mountains to the water's edge, as the want of regularity and foresight with which these operations have been usually conducted. Besides these reasons, as it is necessary that the other materials requisite for the construction and complete armament of vessels of a certain force, should come from Europe, it is neither easy, nor indeed, would it be economical, as was erroneously asserted, to carry into effect the government project of annually building, in the colony, a ship of the line and a frigate. It ought further to be observed, that no stock of timber, cut at a proper season and well cured, has been lain in, and although the wages of the native carpenters and caulkers are moderate, no comparison whatever can be made between the daily work they perform, and that which is done in the same space of time in our dock-yards of Spain.

Notwithstanding, however, the impediments above stated, as it is undeniable that abundance of suitable timber is to be obtained, and as the conveyance of the remainder of the necessary naval stores to the Philippine Islands is shorter and more economical than to the coast of California, it possibly might answer, at least, many mariners are of this opinion, in case it is deemed expedient to continue building at San Blas the brigs and corvettes necessary

## Dye and

 cabinet woods.Timber.

Ship building advantages.
for the protection of the military posts and missions, situated along the above coasts, to order them preferably to be built in Cavite giving timely advice, and previously taking care to make the necessary arrangements.
Gold.

Copper.
Gold abounds in Luzon and in many of the other islands; but as the mountains which conceal it are in possession of the pagan tribes, the mines are not worked; indeed it may be said they are scarcely known. These mountaineers collect it in the brooks and streamlets, and in the form of dust, offer it to the Christians who inhabit the neighboring plains, in exchange for coarse goods and fire-arms; and it has sometimes happened that they have brought it down in grains of one and two ounces weight. The natives of the province of Camarines partly devote themselves to the working of the mines of Mambulao and Paracale, which have the reputation of being very rich; but, far from availing themselves in the smallest degree of the advantages of art, they content themselves with extracting the ore by means of an extremley imperfect fusion, which is done by placing the mineral in shells and then heating them on embers. A considerable waste consequently takes place, and although the metal obtained is good and high colored, it generally, passes into the hands of the district-magistrate, who collects it at a price infinitely lower than it is worth in trade. It is a generally received opinion that gold mines are equally to be met with in the Province of Caraga, situated on the coasts of the great Island of Mindanao, where, as well as in other points, this metal is met with equal to twenty-two karats. The quantity, however, hitherto brought down from the mountains by the pagan tribes, and that obtained by the tributary Filipinos, has not been an object of very great importance.

Well-founded reasons exist for presuming that, in the Province of Ilocos, mines of virgin copper exist, a singular production of nature, or at least, not very common, if the generality of combinations under which this metal presents itself in the rest of the globe, are duly considered. This is partly inferred from the circumstance of its having been noticed that the Igorots, who occasionally come down from the mountains to barter with the Christians, use certain coarse jars or vessels of copper, evidently made by themselves with the use of a hammer, without any art or regularity; and as the ignorance of these demi-savages is too great for them to possess the notions necessary for the separation of the component parts which enter into the combination of minerals, and much less for the con-
struction of furnaces suitable to the smelting and formation of the moulds, it is concluded they must have found some vein of copper entirely pure, which, without the necessity of any other preparation, they have been able to flatten with the hammer and rendered maleable, so as to convert it into the rough vessels above spoken of.

The district-magistrate of Caraga, Don Augustin de Ioldi, received a special commission from the government to explore and obtain information respecting a mine of cinnabar, which was said to be situated under his jurisdiction; and I have been informed of another of the same species in the Island of Samar, the working of which has ceased for a considerable time, not because the prospect was unfavorable, but for the want of an intelligent person to superintend and carry on the operations. The utility of such a discovery is too obvious not to deserve, on the part of government, the most serious attention and every encouragement to render it available; and it is to be hoped that, as the first steps have already been taken in this important disclosure, the enterprise will not be abandoned, but, on the contrary, that exertions will be made to obtain aid and advice from the Miners' College of Mexico, as the best means of removing doubt, and acting with judgment in the affair.

Iron in mineral form is to be found at various points on Luzon, Iron. and those engaged in working it, without the necessity of digging; collect the iron-bearing stones that constitute the upper stratum, these, when placed in fusion, generally yield about forty per cent clear metal. This is the case in the mountains of Angat, situated in the Province of Bulacan, and also in the vicinity of the Baliwag River. In Morong, however, belonging to the Province of La Laguna, where the cannon-ball factory is established, the ore yields under twenty-two per cent. Its quality is in general better than the Biscayan iron, according to formal experiments and a report, made in 1798 to Governor Don Rafael Maria de Aguilar, by two Biscayan master-smiths from the squadron of Admiral Alava. Witnesses to this test were the Count de Aviles and Don Felix de la Rosa, proprietors of the mines of Morong and Angat, and the factor of the Philippine Company, Don Juan Francisco Urroroz. Notwithstanding its advantages, this interesting branch of industry has not yet passed beyond the most rude principles and imperfect practice, owing to the want of correct information as to the best process, and scarcity of funds on the part of the proprietors to carry on their works. Without the aid of rolling or slitting mills, indeed unprovided with the most essential instruments, they have hitherto confined them-
selves to converting their iron into plow shares, bolos, hoes, and such other agricultural implements; leaving the Chinese of Amoy in quiet possession of the advantages of being allowed to market annual supplies of all kinds of nails, the boilers used on the sugar plantations, pots and pans, as well as other articles in this line, which might easily be manufactured in the Islands.
dearls.

Estates.

Spanish planters.

In the Island of Leyte, abundance of sulphur is met with, and from thence the gunpowder works of Manila are supplied at very reasonable prices. Jaspers, cornelians and agates, are also found in profusion in many of these provinces; everything, indeed, promises varied mineral wealth worthy of exciting the curiosity and useful researches of mineralogists, who, unfortunately, have not hitherto extended their labors to these remote parts of the globe.

Pearl fisheries are, from time to time, undertaken off the coast of the Island of Mindanao, and also near smaller islands not far from Cebu, but with little success and less constancy, not because there is a scarcity of fine pearls of a bright color and considerable size, but on account of the divers' want of skill and their just dread of the sharks, which, in great numbers infest these seas. Amber is frequently gathered in considerable lumps in the vicinity of Samar and the other Visayan Islands as well as mother-of-pearl, tortoiseshell, and red and black coral, of the latter kind of which, I have seen shafts as thick as my finger and six or eight feet long.

The proprietors of estates in the Philippines are of four classes. The most considerable is that of the religious orders, Augustinians and Dominicans, who cultivate their respective lands on joint account, or let them out at a moderate ground-rent, which the planters pay in kind; but far from living in opulence, and accumulating the immense revenues some of the religious communities enjoy in America, they stand in need of all they earn and possess for their maintenance, and in order to be enabled to discharge the various duties and obligations annexed to the missions with which they are entrusted.

The second class comprehends the Spanish proprietors, whose number possibly does not exceed a dozen of persons, and even they labor under such disadvantages, and have to contend with so many obstacles, under the existing order of things, that, compelled to divide their lands into rice plantations, in consequence of this being the species of culture to which the natives are most inclined, and to devote a considerable portion of them to the grazing of horned
cattle, no one of them is in a situation to give to agriculture the variety and extent desired, or to attain any progress in a pursuit which in other colonies rapidly leads to riches.

The third consists of the principal mestizos and natives, and is in fact that which constitutes the real body of farming proprietors. In the fourth and last may be included all the other natives, who generally possess a small strip of land situated round their dwellings, or at the extremities of the various towns and settlements formed by the conquerors; besides what they may have obtained from their ancestors in the way of legal inheritance, which rights have been confirmed to them by the present sovereign of the colony.

It will beyond doubt, in some measure dissipate the distrust by which the Filipino is actuated, when the new and paternal exertions of the superior government, to ameliorate his present situation, are fully known, and when that valuable portion of our distant population is assured that their rights will henceforth be respected, and those exactions and compulsory levies which formerly so much disheartened them, are totally abolished. On the other hand, a new stimulus will be given by the living example and fresh impulse communicated to the provinces by other families emigrating and settling there, nurtured in the spirit and principles of those reforms in the ideas and maxims of government by which the present era is distinguished. A practical participation in these advantages will, most assuredly, awaken a spirit of enterprise and emulation that may be extremely beneficial to agriculture, and as the wants of the natives increase in proportion as they are enabled to know and compare the comforts arising out of the presence and extension of conveniences and luxuries in their own towns, they will naturally be led to possess and adopt them.

So salutary a change, however, can only be the work of time, and as long as the government confines itself to a system merely

## Filipino

 farmers.$\qquad$

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Aids to agriculture.

Plans for progress. protecting, the effects must consequently be slow. As it is therefore necessary to put in action more powerful springs than the ordinary ones, it will be found expedient partly to relax from some of those general principles which apply to societies, differently constituted, or rather formed of other perfectly distinct elements. As relating to the subject under discussion, I fortunately discover two means, pointed out in the laws themselves, essentially just, and at the same time capable of producing in this populous colony, more than in any other, the desired results. The legislator, founding himself on the common obligation of the subject to contribute something in return
for the protection he receives, and to co-operate in the increase of the power and opulence of the State, proscribes idleness as a crime, and points out labor as a duty; and although the regulations touching the natives breathe the spirit of humanity, and exhibit the wisdom with which they were originally formed, they nevertheless concur and are directed to this primary object. In them the distribution of vacant lands, as well as of the natives at fair daily wages to clear them, is universally allowed, and these it seems to me, are the means from an equitable and intelligent application of which the most beneficial consequences may be expected.

The f.rst cannot be attended with any great difficulty, because all the provinces abound in waste and vacant lands, and scarcely is there a district in which some are not to be found of private property completely uncultivated and neglected, and consequently susceptible, as above stated, of being legally transferred, for this reason alone, to the possession of an active owner. Let their nature however, be what it may, in their adjudication, it is of the greatest importance to proceed with uniformity, by consecrating, in a most irrevocable manner, the solemnity of all similar grants. Public interest and reason, in the Philippine Islands, require that in all such cases deference only should be paid to demands justly interposed, and formally established within a due and fixed period; but after full and public notice has been given by the respective judiciad authorities, of the titles about to be granted, the counter claims the natives may seek to put in after the lapse of the period prefixed, should be peremptorily disregarded. Although at first sight this appears a direct infringement on the imprescriptible rights of property, it must be considered that in some cases individual interests ought to be sacrifced to the general good, and that the balance used, when treating of the affairs of State, is never of that rigid kind as if applied to those of minor consideration. The fact is, that by this means many would be induced to form estates, who have hitherto been withheld by the dread of involving themselves, and spending their money in la $N$ suits; at the same time the natives, gradually accustoming themselves to this new order of things, would lay aside that disposition to strife and contention, which forms so peculiar a trait in their character, and that antipathy and odium would also disappear with which they have usually viewed the agricultural undertakings of Spaniards.

Compulsory labor.

Confiscating unused lands.
natives, it will suffice to say that it would be equally easy to show that it is absolutely necessary rigorously to carry into effect, in the Philippine Islands, whatever the laws on this subject prescribed, otherwise we must give up all those substantial hopes entertained of the felicity of the colony. We are no longer in a situation to be restricted to the removal of ordinary obstacles, and the season is gone by in which, as heretofore, it entered into our policy to employ no other than indirect stimulants-in order to incline the Filipino to labor. It is evident that admonitions and offers of reward no longer suffice; nor indeed have the advantageous terms proposed to them by some planters, with a view to withdraw the lower orders of the natives, such as the timauas and caglianes, or plebeians, from the idle indifference in which they are sunk, been of any avail. Their wants and wishes being easily supplied, the whole of their happiness seems to depend on quiet and repose, and their highest enjoyment on the pleasure of sleep. Energy, however, and a certain degree of severity must be employed, if permanent resources are to be called forth, and if the progressive settlement of European families and the formation of estates proportioned to the fertility of the soil and capabilities of the country are to enter into the views of government. In vain would grants and transfers of vacant and useless lands be made to new and enterprising proprietors, unless at the same time they can be provided with laborers, and experience every other possible facility, in order to clear, enclose, and cultivate them. Hence follows the indispensable necessity of appealing to the system of distributions, as above pointed out; for what class of laborers can be obtained in a country where the whites are so few, unless it be the natives? Should they object to personal service, should they refuse to labor for an equitable and daily allowance, by which means they would also cease to be burdens to the State and to society, are they not to be compelled to contribute by this means to the prosperity of which they are members; in a word, to the public good, and thus make some provision for old age? If the soldier, conveyed away from his native land, submits to dangers, and is unceasingly exposed to death in defence of the State, why should not the Filipino moderately use his strength and activity in tilling the fields which are to sustain him and enrich the commonwealth ?

Besides, things in the Philippine Islands wear a very different aspect to what they do on the American continent, where, as authorized by the said laws, a certain number of na ives may be impressed

The undeveloped Philippines. for a season, and sent off inland to a considerable distance from their
dwellings, either for the purpose of agriculture, or working the mines, provided only they are taken care of during their journeys, maintained, and the price of their daily labor, as fixed by the civil authorities, regularly paid to them. The immense valleys and mountains susceptible of cultivation, especially in the Island of Luzon, being once settled, and the facilities of obtaining hands increased, such legal acts of compulsion, far from being any longer necessary, will have introduced a spirit of industry that will render the labors of the field supportable and even desirable; and in this occupation all the tributary natives of the surrounding settlements can be alternately employed, by the day or week, and thus do their work almost at the door of their own huts, and as it were in sight of their wives and children.

If, after what has been above stated, the apparent opposition which at first sight strikes the eye, in Law 40, Title 12, Book 6, speaking on this subject, and expressly referring to the Philippine Islands, should be alleged, no more will be necessary than to study its genuine sense, or read it with attention, in order to be convinced of its perfect concordance with the essential parts of the other laws of the Indies, already quoted in explanation and support of the system of distributing the laborers. The above-mentioned law does indeed contain a strict recommendation to employ the Chinese and Japanese, not domiciliated, in preference to the natives, in the establishments for cutting timber and other royal works, and further enjoins that use is only to be made in emergencies, and when the preservation of the state should require it. It has, however, happened that, since the remote period at which the above was promulgated, not only all contracts and commerce have ceased, but also every communication with Japan has been interrupted, and for a number of years not a single individual of that ferocious race has existed in the Philippine Islands. With regard to the Chinese, who are supposed to be numerous in the capital, of late years they have diminished so much, that according to a census made by orders of the government in the year 1807, no more than four thousand seven hundred are found on the registers; and, if in consequence of their secreting themselves, or withdrawing into the interior, a third more might be added to the above amount, their total numbers would still remain very inconsiderable, and infinitely inferior to what is required, not only for the tillage of the estates, but even for the royal works.

As, therefore, the Japanese have totally disappeared, and the number of Chinese is evidently inadequate to the wants of agriculture, it almost necessarily follows that the practice of distributing

No legal obstacle to forced labor.

Substitute
laborers
wanting.
the Filipino laborers, as allowed by the aforesaid laws of the Indies, under all circumstances, is the only alternate left. Even if, against the adoption of this measure, it should be attempted to urge the ambiguous sense of the concluding part of the second clause, it would be easy to comprehend its true intent and meaning, by referring to Law 1, Title 13, Book 5, which says:
"That, considering the inconveniences which would arise from doing away with certain distributions of grounds, gardens, estates, and other plantations, in which the Indians are interested, as a matter on which the preservation of those distant dominions and provinces depends, it is ordained that compulsory labor, and such distributions as are advantageous to the public good, shall continue."

After so pointed an explanation, and a manifestation so clear of the spirit of our legislation in this respect, all further comments would be useless, and no doubt whatever can be any longer entertained of the expediency, and even of the justice of putting the plan of well-regulated distributions in practice, as a powerful means to promote the agriculture, and secure to Spain the possession of these valuable dominions of the Indian Seas.
...... It would be impossible to gainsay Don Juan Francisco Urroz, of the Philippine Company, in his detailed and accurate report to the managing committee in 1802, when he observes:
"That the Philippine Islands, from time immemorial, were acquainted with, and still retain, that species of industry peculiar to the country, adapted to the customs and wants of the natives, and which constitutes the chief branch of their clothing. This, although confined to coarse articles, may in its class be called perfect., as far as it answers the end for which it is intended; and if an attempt were made to enumerate the quantity of mats, handkerchiefs, sheeting, and a variety of other cloths manufactured for this purpose only in the Provinces of Tondo, Laguna, Batangas, Ilocos, Cagayan, Camarines, Albay, Visaya, etc., immense supplies of each kind would appear, which give occupation to an incalculable number of looms, indistinctly worked by Indians, Chinese, and Sangleyan mestizos, indeed all the classes, in their own humble dwellings, built of canes and thatched with palm leaves, without any apparatus of regular manufacture."

With equal truth am I enabled to add, that the natural abilities of these natives in the manufacture of all kinds of cloths, fine as well

Native cloth wearing. as coarse, are really admirable. They succeed in reducing the harsh filaments of the palm-tree, known by the name of abaca, to such a degree of fineness, that they afterwards convert them into textures equal to the best muslins of Bengal. The beauty and evenness of their embroideries and open work excite surprise; in short, the

## Aptitude

 for. but no development of, manufacturing.Improved methods and machinery needed.
damask table-cloths, ornamental weaving, textures of cotton and palm-f.bres, intermixed with silk, and manufactured in the abovementioned provinces, clearly prove how much the inhabitants of the Philippine Islands, in natural abilities and dexterity, resemble the other people of the Asiatic regions. It must nevertheless be allowed, that a want is noticed of that fnish and polish which the perfection of art gives to each commodity; but this circumstance ought not to appear strange, if we consider that, entirely devoid of all methodical instruction, and ignorant also of the importance of the subdivision of labor, which contributes so greatly to simplify, shorten, and improve the respective excellence of all kinds of works, the same natives gin and clean the cotton, and then spin and weave it, without any other instruments than their hands and feet, aided only by the course and unsightly looms they themselves construct in a corner of their huts, with scarcely anything else than a few canes and sticks.

From the preceding observations it may easily be deduced that, although the natives succeed in preparing, with admirable dexterity, the productions of their soil, and therewith satisfy the greatest part of their domestic wants, facts which certainly manifest their talents and aptitude to be employed in works of more taste and delicacy, manufacturing industry is nevertheless far from being generalized, nor can it be said to be placed with any degree of solidity on its true and proper basis. Hence arise those great supplies of goods annually imported into the country, for the purpose of making up the def.ciencies of the local manufactures.

The regular distribution or classiaction of the assemblage of operations which follow each other in graduation, from the rough preparation of the frst materials, till the same have arrived at their perfect state of manufacture, instead of being practiced, is entirely unknown. The want of good machinery to free the cotton from the multitude of seeds with which it is encumbered, so as to perform the operation with ease and quickness, is the first and greatest obstacle that occurs; and its tediousness to the natives is so repugnant, that many sell their crops to others, without separating the seeds, or decline growing the article altogether, not to be plagued with the trouble of cleaning it. As the want of method is also equal to the superabundance or waste of time employed, the expenses of the goods manufactured increased in the same proportion, under such evident and great disadvantages; for which reason, far from being able to compete with those trought from China and British India, they only acquire estimation in the interior, when wanted to supply the place of the latter, or in cases of accidental scarcity.

In a word, the only manufactured articles annually exported from the Philippine Islands are eight to twelve thousand pieces of light sail cloth, two hundred thousand pounds of abaca cordage assorted, and six hundred carabao hides and deer skins, which can scarcely be considered in a tanned state; for, although the Royal Company, from the time of their establishment, long continued to export considerable quantities of dimities, calicos, stripes, checks, and coverlids, as well as other cotton and silk goods, it was more with a view to stimulate the districts of Ilocos to continue in the habit of manufacturing, and thus introduce among the inhabitants of that province a taste for industry, than the expectation of gain by the sale of this kind of merchandise, either in Spain or any of the sections of America. At length, wearied with the losses experienced by carrying on this species of mercantile operations, without answering the principal object in view, they resolved, for the time being, to suspend ventures attended with such discouraging circumstances.

Notwithstanding so many impediments, it would not, however, be prudent in the government entirely to abandon the enterprise, and lose sight of the advantages the country offers, or indeed, to neglect turning the habitual facilities of the natives to some account. Far from there existing any positive grounds for despairing of the progress of manufacturing industry, it may justly be presumed that, whenever the sovereign, by adopting a different line of policy, shall allow the unlimited and indistinct settlement of all kinds of foreign colonists, and grant them the same facilities and protection enjoyed by national ones, they will be induced to flock to the Philippine Islands in considerable numbers, lured by the hope of accumulating fortunes in a country that presents a thousand attractions of every kind. Many, no doubt, will preferably devote themselves to commerce, others to agricultural undertakings and also to the pursuits of mining, but necessarily some will turn their attention and employ their funds in the formation of extensive manufactures, aided by intelligent instructors and suitable machinery. The newly-introduced information and arts being thus diffused, it is natural to expect they will be progressively adopted by a people already possessing a taste and genius for this species of labor, by which means manufacturing industry will soon be raised from the state of neglect and unprofitableness in which it is now left.

The circulation of the country productions and effects of all kinds among the inhabitants of the provinces, which, properly speaking, constitutes their internal commerce, is tolerably active

Internal commerce handicupped.
and considerable. Owing to the great facilities of conveyance afforded by the number of rivers and lakes, on the margins of which the Filipinos are fond of fixing their dwellings, this commerce might be infinitely greater, if it was not obstructed by the monopoly of the magistrates in their respective districts and the unjust prerogative, exercised by the city, of imposing rates and arbitrary prices on the very persons who come to bring the supplies. Nevertheless, as the iniquituous operations of the district magistrates, however, active they may be, besides being restricted by their financial ability, regularly consist of arrangements to buy up only the chief articles, and those which promise most advantage, with least trouble; as that restless inquietude which impels man on, under the hope of bettering his condition, acts even amidst rigor of oppression, a certain degree of stimulus and scope is still left in favor of internal trade.

Inter-island traffic.

Hence it follows, that there is scarcely an island or province, that does not carry on some traffic or other, by keeping up relations with its neighbors, which sometimes extend as far as the capital; where, in proportion as the produce and raw materials find a ready market, returns suitable and adequate to the consumption of each place, respectively, are obtained. If, however, it would be difficult to form an idea, even in the way of approximation, of the exchanges which take place between the various provinces, a task that would render it necessary to enumerate them, one by one, it is equally so to make an estimate of the total amount of this class of operation carried on in Manila, their common center. Situated in the bottom of an inmense bay, bathed by a large river, and the country round divided by an infinite number of streams and lakes descending from the provinces by which the capital is surrounded, the produce and effects are daily brought in and go out of suburbs so extended in a diversity of small vessels and canoes, without its being possible to obtain any exact account of the multiplicity of transactions carried on at one and the same time, in a city built on so large a scale.

Besides the traffic founded on ordinary consumption, the necessity of obtaining assortments of home-manufactured as well as imported goods, in order to supply the markets, known by the name of tianguis, and which are held weekly in almost every town, there is another species of speculation, peculiar to the rich natives and Sangley mestizos, an industrious race, and also possessed of the largest portion of the specie. This consists in the anticipated purchase of the crops of indigo, sugar, rice, etc., with a view to
fix their own prices on the produce thus contracted for, when resold to the second hand. A propensity to barter and traffic, in all kinds of ways, is indeed universal among the natives, and as the principal springs which urge on internal circulation are already in motion, nothing more is wanting than at once to destroy the obstacles previously pointed out, and encourage the extension of luxury and comforts, in order that, by the number of the people's wants being increased, as well as the means of supplying them, the force and velocity of action may in the same proportion be augmented.

Under "External Commerce" generally are comprised the relations the Philippine Islands keep up with other nations, with the Spanish possessions in America, and with the mother country; or, in other words, the sum total of their imports and exports.

Many are the causes which, within the last ten or twelve years, have influenced the mercantile relations of these Islands, and prevented their organization on permanent and known principles. The chief one, no doubt, has been the frequent and unforeseen changes, from peace to war, which have marked that unhappy period, and as under similar circumstances merchants, more than any other class of persons, are in the habit of acting on extremes, there have been occasions in which, misled by the exaggerated idea of the galleon of Acapulco, and anxious to avail themselves of the first prices, generally also the highest, foreign speculators have inundated Manila with goods, by a competition from all quarters; and others, owing to the channels being obstructed, when this market has experienced an absolute scarcity of commodities, as well as of funds necessary to continue the usual and almost only branch of commerce left. The frequent failure of the sugar and indigo crops, has also in many instances restrained the North Americans and other neutrals from coming to these Islands with cargoes, and induced them to prefer Java, where they are at all times sure of finding returns. Besides the influence of these extraordinary causes on the uncertainty and irregularity of external commerce, no small share must also be attributed to the strangeness of the peculiar constitution of the country, or the principles on which its trade is established.

Scarcely will it be believed, in the greater part of civilized Europe, that a Spanish colony exists between Asia and America, whose merchants are forbidden to avail themselves of their advantageous situation, and that, as a special favor only are they allowed to send their effects to Mexico, once a year, but under the following restrictions. It is a necessary condition, that every shipper shall

External commerce. Outside deterrents.

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be a member of the Board of Trade (Consulado), and therein entitled to a vote, which supposes a residence of some years in the country, besides the possession of property of his own to the amount of $\$ 8,000$. He is compelled to join with the other members, in order to be enabled to ship his goods in bales of a determined form and dimensions, in one single vessel, arranged, fitted out, and commanded by officers of the royal navy, under the character of a war ship. He has also to contribute his proportion of $\$ 20,000$, which, in the shape of a present, are given to the commander, at the end of every round voyage. He cannot in any way interfere in the choice or qualities of the vessel, notwithstanding his property is to be risked in her; and what completes the extravagance of the system, is, that before anything is done he must pay down twenty-five or forty per cent for freight, according to circumstances, which money is distributed among certain canons of the church, aldermen, subalterns of the army, and widows of Spaniards, to whom a given number of tickets or certined permits to ship are granted, either as a compensation for the smallness of their pay, or in the way of a privilege; but on express conditions that, although they themselves are not members of the Board of Trade, they shall not be allowed to negotiate and transfer them to persons not having that quality. In the custom house nothing being admitted unless the number of bales shipped are accompanied by corresponding permits, and as it besides frequently happens that there is a degree of competition between the parties seeking to try their fortune in this way, the original holders of the permits very often hang back, in such a manner that I have seen $\$ 500$ offered for the transfer of a right to ship three bales, which scarcely contained goods to the amount of $\$ 1,000$. Such, nevertheless, is the truth, and such the exact description of the famous Acapulco ship, which has excited so much jealousy among the merchants of Seville and Cadiz, and given rise to such an infinite number of disputes and lawsuits.

Business irregularities.

So complete a deviation from the rules and maxims usually received in trade, could not fail to produce in the Philippine Islands, as in fact it has, effects equally extraordinary with regard to those who follow this pursuit. The merchant of Manila is, in fact, entirely different from the one in Cadiz or Amsterdam. Without any correspondents in the manufacturing countries and consequently possessed of no suitable advices of the favorable variations in the respective markets, without brokers and even without regular books he seems to carry on his profession on no one fixed principle, and to
have acquired his routine of business from mere habit and vague custom. His contracts are made out on stamped paper, and his bills or promissory notes no other than long and diffuse writings or bonds, of which the dates and amounts are kept more in the shape of bundles than by any due entry on his books; and what at once gives the most clear idea of this irregularity is the singular fact that, for the space of twenty-five and possibly fifty years, only one bankrupt has presented the state of his affairs to the Board of Trade, in conformity to the regulations prescribed by the general Statutes of Bankruptcy, whereas, numbers of cases have occurred in which these merchants have wasted or secreted the property of others with impunity. Hence have arisen those irregularities, subterfuges and disputes, in.a word, the absence of all mercantile business carried on in a scrupulously punctual and correct manner. Hence, also, have followed that distrust and embarras:ment with which commercial operations are attended, as well as the difficulty of calculating their fluctuations. On the other hand, as in order to send off an expedition by the annual ship to Acapulco, the previous consent of the majority of the incorporated merchants is necessary, before this point is decided, months are passed in intrigues and disputes, the peremptory period arrives, and if the articles wanted are in the market, they are purchased up with precipitation and paid for with the monies the shippers have been able to obtain at an interest from the administrators of pious and charitable funds. In this manner, compelled to act almost always without plan or concert, yet accustomed to gain in the market of Acapulco, notwithstanding so many impediments and the exorbitant premiums paid for the money lent, these merchants follow the strange maxim of risking little or no property of their own; and unaware, or rather, disregarding the importance of economy in the expenses and regularity of their general method of living, it is not possible they can ever accumulate large fortunes, or form solid and well-accredited houses.

Thus oppressed by a system, as unjust as it is absurd, and conducting their affairs in the way above described, it is not strange that these gentlemen, at the same time yielding to the indolence consequent on the climate, should neglect or behold with indifference all the other secondary resources which the supplying the wants of the country and the extensive scope and variety of its produce offer to the man of active mind. Hence it follows, as already observed, that the whole of the interior trade is at present absorbed by the principal natives, the Sangley mestizos of both sexes, and a few Chinese peddlers.

Merchants discouraged.

The outlook brightening.

Capital employed
in commerct.

Notwithstanding, however, the defective manner in which the generality of the merchants act, some already are beginning to distinguish themselves by the prudence of their conduct, by forwarding, in time, their orders to the manufacturers of India and China, and, in other respects guiding themselves by the principles which characterize the intelligent merchant. Finally, it is to be presumed that, as soon as the government shall have thrown down this singular and preposterous system that has been the cause of so many disorders, and proclaimed the unlimited freedom of Philippine commerce, the greater part of these people will rise up from the state of inaction in which they now live, and the relations of the colony will then assume the course and extent corresponding to its advantages of position. At least, if our national merchants should not act up to the impulse given to all kinds of mercantile enterprises by the beneficial hand of the sovereign, foreigners will not be wanting, who, relying on due toleration, will be induced to convey their fortunes and families to the Philippine Islands, and, vigorously encouraging the exportation of their valuable productions, amply secure the fruits of their laudable activity and well-combined speculations.

Were a person, judging from the numbers constituting the body of registered merchants, and supposing all of them to possess the essential requisites prescribed by our commercial regulations, to form a prudent estimate of the amount of capital employed by them, his calculations would turn out extremely erroneous, for besides the ease with which regulations of this kind are eluded, many are merely nominal traders, and there are others whose mercantile existence is purely artificial for they are sustained in a temporary manner, by means of a forced species of circulation peculiar to this country. This consists in obtaining the acquiescence of the administrators of pious and charitable funds, let out at interest, to renew the bonds they hold during other successive risks, waiting, as it were, till some fatal tempest has swallowed up the vessel in which these merchants suppose their property to be embarked, and at once cancel all their obligations. On the other hand, neither excessive expenses nor the shipment of large quantities of goods to Acapulco can in any way be taken as a just criterion whereby to judge of the fortunes of individuals; because, in the first, there is great uniformity, every one, more or less, enjoying, exteriorly, the same easy circumstances, notwithstanding the disparity of real property; and in the second, considerable fiction prevails, many persons shipping under the same mark, and even when the shipper stands alone, he might have been provided with the necessary funds from the pious and charitable
establishments, possibly without risking a dollar of his own in the whole operation. Under circumstances so dubious, far from presuming to give a decided opinion on the subject, I am compelled to judge from mere conjectures, and guided only by the knowledge and experience $I$ have been able to acquire during my long residence there. In conformity thereto, I am inclined to believe, that the total amount of capital belonging to and employed in the trade of the Philippine Islands, does not at present exceed two and a half million dollars, with evident signs of rapid decline, if the merchants do not in time abandon the ruinous systems of chiefly carrying on their speculations with money obtained at interest.

The two and a half million dollars thus attributed to the merchants, form, however, the smaller part of the funds distributed among the other classes, and the total amount of the circulating medium of the colony might be considered an object sufficiently worthy of being ascertained, owing to the great light it would throw on the present state of the inhabitants; but it is in vain to attempt any calculation of the kind, at least without the aid of data possessing a certain degree of accuracy. The only thing that can be affirmed is, that during the period of more than two hundred and fifty years which have elapsed since the conquest, the ingress of specie into the Philippine Islands has been constant. Their annual ships have seldom come from New Spain without bringing considerable sums in return, and if some of them have been lost, many others, without being confined to the one million of dollars constituting the ordinary amount of the permit, have not unfrequently come back with triple that sum; for which reason there are ample grounds of judging the estimates correct, which fix the total importation of dollars, during the whole of that long period of years, to be equal to four hundred millions. It may further be observed that, as in the Sangley mestizos economy and avarice compete with intelligence and activity in accumulating wealth and as they are scattered, among the principal islands, and in possession of the best lands and the most lucrative business of the interior, there are ample motives for presuming that these industrious and sagacious people have gradually, although incessantly, amassed immense sums in specie; but it would be impossible to point out their amount, distribution, or the secret places in which they are hoarded.

The assemblage of pious legacies, temporalities, and other funds and property placed under the care of several administrative committees, for purposes as well religious as charitable, constitute the

Large sum.s hoarded.

Pious and charitable funds' capitat.
chief capital employed in external trade; and notwithstanding the failures, which from time to time occur, the subsequent accumulation of the enormous premiums obtained for funds laid out in maritime speculations, both in time of peace and war, not only suffices to make up all losses of the above kind, but also to secure the punctual payment of such charitable pensions and other charges as are to be deducted from the respective profits of this species of stock. its total amount, according to an official report made by order of the head committee of the sinking fund, including temporalities, and Queen Maria of Austria's endowment for the College of Las Marianas, together with other funds of the same kind, not comprehended in the decree of abolition, at the commencement of the year 1809 , amounted to $\$ 2,470,390$, and as the sea-risks of that and the following year were successful, and the outstanding amounts punctually recovered, the aggregate sum, arising out of the above description of property, may now be estimated at more than three millions. Of these funds three distributions are generally made, viz., one part is appropriated to the China risks, at from twelve to eighteen per cent. premium, according to circumstances, and also those to Madras, Calcutta and Batavia, at from sixteen to twentytwo per cent. The second, which generally is in the largest proportion, is employed in risks to Acapulco, at various premiums, from 27 to 45 per cent.; and the third is left in hand, as a kind of guarantee of the stability of the original endowments.

Coveted by Spanish treasury.

Easy capital but lessened profits.

In the great exigencies of the Royal Treasury, experienced during the last years of the administration of Sr. Soler, the royal decree of Consolidación was extended to the Philippine Islands, under the pretext of guarding the funds belonging to public charities and religious endowments . .... sea-risks, the income of which, when secured on good mortgages, does not generally exceed five per cent, many in Spain not yielding above four; but the remarkable difference between this plan and the one above described, together with various and other weighty reasons alleged by the administrators, caused the dreaded effect of this new regulation to be suspended, and whilst the head committee of Manila were consulting their doubts and requesting fresh instructions from the court at home, orders came out not to make any alteration in measures relating to this description of property.

Accustomed, in their limited calculations, to identify the resources, offered by the funds belonging to this class of establishments, with the very existence of the colony, the needy merchants
easily confound their personal with the general interest; and few stop to consider that the identical-means of carrying on trade, without any capital of their own, although they have accidentally enriched a small number of persons, eventually have absorbed the principal profits, and possibly been the chief cause of the unflourishing state of the colony at large. Without fearing the charge of rashness, it may, in fact, be asserted, that if these charities and pious endowments had never existed, public prosperity in the Philippine Islands would, as in other parts, have been the immediate effect of the united efforts of the individual members of the community and of the experience acquired in the constant prosecution of the same object. As, however, a progress of this kind, although certain, must necessarily have been at first extremely slow, and as, on the other hand, the preference given to mercantile operations undertaken with the funds belonging to public charities, has its origin in the assemblage of vices so remarkable in the very organization of the body of Philippine merchants, any new measure on this subject might be deemed inconsistent, that at once deprived them of the use of resources on which they had been accustomed to rely, without removing those other defects which excuse, if not encourage, the continuation of the present system. Without, therefore, appealing to violent remedies, it is to be hoped that, in order to render plans of reform effectual, it will be sufficient, under more propitious circumstances, to see property brought from other countries to these Islands, as well as persons coming to settle in them, capable of managing it with that intelligence and economy required by trade. The competition of those who speculate at random would then cease, or what is the same, as money obtained at a premium could not then be laid out with the same advantages by the merchants as if it was their own, it will be necessary to renounce the fallacious profits held out by the public charities, till at least they are placed on a level with existing circumstances, and brought in to be of real service to the honorable planter and laborious merchant, in their accidental exigencies, ceasing to be, as hitherto, the indirect cause of idleness, dissipation, and the ruin of an infinite number of families.

The vessels which the district magistrates of the provinces employ in carrying on their trade with the capital and those belonging

Mercantile shipping. to some of the richer merchants, together with such as are owned by the natives and mestizos, on an approximate calculation, amount to twelve thousand tons, including ships, brigs, schooners, galleys, barges, etc. For the want of better data, this estimate is founded only on reasonable conjecture, aided by the advice of experienced
persons, for although the greatest part of these vessels are built by the natives in the neighborhood of their own towns, no register is kept of their number and dimensions, nor do they carry with them the usual certificates. Those belonging to the merchants, that is, ships and brigs of a certain size, have already begun to frequent the ports of China, Java, the coast of Coromandel, Bengal, and the Isle of France, availing themselves of the lucrative freights which formerly enriched and encouraged foreign shipping. The other class of vessels, although perfectly adequate to the coasting trade, cannot in general be applied to larger enterprises, on account of their not being sufficiently strong and capacious. The seamen are not apprenticed, or as it is usually called, matriculated, but their frequent crossing from island to island, their familiarity with regional tempests, voyages to various parts of America, and the occupation of fishing followed by the inhabitants of the coast, serve to train up a large body of dexterous and able mariners who at all times can be had, without any compulsion, to complete the crews.

Need of nautical school.

Royal
Philippine company.

The want of a public school for the teaching of navigation, is, however, sensibly felt, as well as great inconvenience from the scarcity of persons capable of being trusted with the command of vessels, and the ignorance that prevails of the waters of this dangerous Archipelago. Repeated royal orders have been sent over for the board of trade to proceed to the institution of so useful an establishment, and in the meantime, a medium has been resorted to in order to supply the deficiency, by allowing the free admission of foreign mates, provided they exhibit proofs of their acquaintance with navigation, and profess the Catholic worship. Shipowners nevertheless experience great difficulties, particularly at times when the Acapulco ship is fitting out, for although she is considered as a vessel of war, and commanded by officers of the royal navy, the plan of her equipment is so singular, that in addition, she requires the extra aid of one chief mate, and three under ones.

The various modifications this corporate body has successively experienced, have, in great measure, changed the essence of its original constitution, and the remonstrances of its directors, founded on the experience of a long series of years, at length induced the government at home to sanction alterations dictated by existing circumstances. The project of raising these Islands from the neglected state in which they were, and in some measure to place them in contact with the mother country, accompanied by a wish to give a new and great impulse to the various branches of industry which constitute the importance of a colony, could not have been more
audable; but, as was afterwards seen, the instrument employed was not adequate the object in view. At the same time that the company were charged to promote, and, by means of their funds, to vivify the agriculture and industry of these provinces, the necessary powers and facilities to enable them to reap the fruits of their sacrifices were withheld. The protection granted to this establishment, did not go beyond a general recommendation in favor of its enterprises, and, in short, far from enjoying the exclusive preponderance obtained at their commencement by all the other Asiatic companies, that of the Philippine Islands labored under particular disadvantages.

Notwithstanding an organization so imperfect, scarcely had the agents of the new Company arrived at Manila, when they distributed through the country their numerous dependents, commissioned to encourage the natives by advances of money. They established subaltern factories in the Provinces of Ilocos, Bataan, Cavite, and Camarines; purchased lands; delivered out agricultural implements; founded manufacturies of cotton cloths; contracted for the crops of produce at very high prices; offered rewards and, in short, they put in motion every partial resources they were able to avail themselves of and their limited means allowed. It would be extremely easy for me, in this place, to enter a particular enumeration of the important services of this kind rendered by the company, and to exhibit, in the most evident point of view, the advantages thence derived to these Islands, if, besides being slightly touched upon in the preceding articles, this task had not been already ably performed by the Factor Don Juan Francisco Urroz, in his accurate reporton this subject, addressed to the governing committee of the company, in 1803. In justice I will nevertheless observe, that this establishment, anxiously resolved to attain the end proposed, in spite of so many obstacles, constantly followed up its expensive system without being disheartened; nor did the contrarieties with which the Royal Audiencia, or High Court of Justice, frequently paralyzed its plans, the indifference of the governors, or the general opposition and jealousy of the other classes, in any way tend to relax its efforts, till at length, convinced of the impossibility of successfully contending, alone and without any other arms than its own reduced capital; and, on the other hand, well aware that a political body of this kind in vain seeks to unite within itself the triple and opposite characters of agriculturalist, manufaturer, and merchant, a determination was taken to alter the plan, and withdraw the factories established in the provinces, and by adopting a rigid economy and confining the operations in future to the purchase of such produce and manufactured articles

Local progress under adverse conditions.

## Handicapped <br> in outside trade

as suited their trade, and were voluntarily brought by the natives to their stores, the expenses of the Company were curtailed, and a plan of reform introduced into all their speculations. By this means also they always secured an advantageous vent for the productions of the country, after having been the chief spring by which agriculture was promoted and encouraged in a direct manner.

The most beneficial reform, however, introduced by this establishment into its system, has, in reality, been derived from the variation or rather correction of its plans and enterprises, purely maritime. The government being desirous to increase the relations of this colony by every possible means, and to convert it into a common center of a.ll the operations of the new company, at first required of the agents that the purchases and collection of goods from the coast of Coromandel, Bengal, and China, destined for Spain, should take place at Manila, either by purchasing the articles in that market, or through the medium of previous contracts to deliver them there. From this it is easy to infer, that the company was infallibly exposed to the harsh terms the respective contractors sought to impose upon them, as well with regard to prices as qualities, unless, in many cases, they preferred being left without the necessary assortments. Hence may it, without the smallest exaggeration, be affirmed, that, summing up all the surcharges under which the shipments left the port of Manila, and comparing them with those whidh might have been sent direct from the above-mentioned points, and without so extraordinary a détour as the one prescribed by law, the difference that followed in the prime cost of the cargos was not less than 80 per cent. The urgent manner, however, in which the directors of the company did not cease to deplore and complain of so evident a hardship, at length had the desired effect, and after existing ten or twelve years, so preposterous a system was successfully overthrown, and permission obtained from the king for the establishment of Spanish factories in the neighborhood of the China and India manufactures, as well as the power of addressing shipments direct to those foreign dominions. The enlightened policy of their respective governments did not allow them to hesitate in giving a favorable reception to our factors and vessels, and the purchases and shipments of Asiatic goods being thus realized without the old obstructions, the Company was reasonably led to hope being able soon to increase its operations, and progressively present more satisfactory results to the shareholders, when those political convulsions succeeding soon after, which have unhinged or destroyed all the ordinary relations of trade, compelled them to abandon their hopes, till the wished-for calm should be again restored.

In consequence of the new character and route given to the Temporary commercial enterprises of the Company, as authorized by a royal decree of July 12, 1803, the functions of the Manila factors were reduced to the annual shipment of a cargo of Asiatic goods to Peru, valued at $\$ 500,000$, but only as long as the war lasted, and till the expiration of the extraordinary permits granted through the goodness of the king, and also to the transmitting to China and Bengal of the specie brought from America, and the collecting of certain quantities of indigo, sugar, or other produce of the Islands, with a view to gain by reselling it in the same market. Consequently, the moment things return to their pacific and ordinary course, will be the period when the necessity of the future existence of this establishment will cease, or at least, when the propriety will be evident of its reform or assimilation to the other commission houses, carrying on trade in Vera Cruz, Mexico, etc., which, not being hired establishments, do not create expenses when they cease to transact business.

Against a measure of this kind it would be useless to allege, that, "by the exclusive privilege to introduce spirits and European effects into the colony, the Company has contracted the obligation of always keeping it properly supplied; that their very institution had for the basis the general improvement of the Islands, and in order duly to comply with these duties, it becomes indispensably necessary to keep up the present expensive establishment;" for, in the first place, in order, to render it incumbent on the company to introduce an indefinite quantity of European articles, it previously would be necessary to provide a vent for them, and this can never be the case, unless the exclusion of all competitors in the market is rigorously carried into effect. As things now are, the North Americans, English, French, and every other nation that wishes, openly usurped this privilege, by constantly inundating the Islands with spirits and all kinds of effects, and it is very evident that this same abuse which authorizes the infraction of the above privilege, if in that light it could in any way be considered, totally exonerates the company from all obligations by them contracted under a different understanding. Besides, the circumstances which have taken place since the publication of the royal decree, creating the above establishment into a corporate body, in the year 1785, have entirely changed the order established in this respect. In the first place, the port of Manila has been opened to foreign nations, in consequence of the distinterested representations of the company itself, and for the direct advantage of general trade; nor was it neces-
expedient of 1863.

Conpetition of foreign merchants.
sary to prevent our new guests from abusing the facilities thus granted to them, and much less to confine them to the mere introduction of Asiatic goods, the original plea made use of. In the second, as soon as the inhabitants of the Philippine Islands became familiar with the more useful and elegant objects of convenience and luxury, which they were enabled to purchase from foreigners, at reasonable prices, it was natural for them to pay little regard to the superfluous aid of the company, more particularly when the latter were no longer able to sustain the competition, either in the sale or supply of a multitude of articles, which, thanks to our own national simplicity, are scarcely known in Spain, whence their outward-bound cargoes are divided. Hence it follows that, far from the importation and supplies of the company being missed, it may with great reason be presumed, that this formal renunciation of this ideal privilege of theirs, must rather have contributed to secure, in a permanent manner, adequate supplies for all the wants and whims of the inhabitants of the colony; and that the publicity of such a determination would act as a fresh allurement successively to bring to the port of Manila a host of foreign speculators, anxious to avail themselves of a fresh opening for commercial pursuits.

Company not
a philanthropy.

The other objection, founded on the mistaken notion of its being inherent in, and belonging to, the very essence of the company, to promote the general improvement of the Philippine Islands, if well considered, will appear equally unjust. It is, in fact, a ridiculous, although too generally received, a prejudice to suppose, that the founders of this establishment proposed to themselves the plan of sinking the money of the shareholders in clearing the lands, and perfecting the rude manufactures of these distant Islands. To imagine this to have been one of the principal objects of the institution, or to suppose that, on this hard condition, their various privileges and exemptions were granted to them, is so far from the reality of the fact, that it would only be necessary to read with attention the 26 th article of the quoted royal decree of creation, in order more correctly to comprehend the origin and constitutive system of this political body.
"The latter," says the Duke de Almodovar, "is reduced to two principal points: the first of which is the carrying of the trade of Asia with that of America and Europe; and the second, the encouragement and improvement of the productions and manufacturing industry of the Islands. The one is the essential attribute of the company, constituting its real character of a mercantile society; and, in the other respect, it becomes an auxiliary of the govern-
ment, to whom the duties alluded to more immediately belong." If to the above wesadd the preamble of the 43 rd article of the new decree of 1803 , the recommendation, made to the company, to contribute to the prosperity of the agriculture and manufacturing industry of the Islands, will appear as a limited and secondary consideration; for even if the question were carried to extremes, it could never extend to any more than the application of four per cent of the annual profits of the company indistinctly to both branches. If, however, any doubts still remained, the explanation or solution recently given to this question would certainly remove them; because, by the simple fact of its being expressed in the latter part of the aforesaid 43rd article, "That the above-mentioned four per cent was to be laid out, with the king's approbation, in behalf of the agriculture and manufacturing industry of Spain and the Philippine Islands," it is clear that the king reserves and appropriates to himself the investment of the amount to be deducted from the general dividends, in order to apply it where and how may be deemed most advisable. Consequently, far from considering the company in that respect under an obligation to contribute to the improvement of the Philippines exclusively, the only thing that can be required of them, when their charter is withdrawn, is, the repayment to the royal treasury of the four per cent on their profits, for a purpose so vaguely defined. In following up this same train of argument, it would seem that, in order to render the amount to be deducted from the eventual profits of the company, in the course of time, a productive capital in the hands of the sovereign, the funds of the society not only ought not to be diverted to the continuation of projects which consume them, but, on the contrary, it is necessary to place at their disposal the direct means by which these funds can be increased, in order to make up to the company in some measure the enormous losses experienced of late years, and at once free their commerce from the shackles with which it has hitherto been obstructed.

Finally, after twenty-four years of impotent and gratuitous efforts in the Philippines, and of the most obstinate opposition on the part of their rivals, it is now time for the company, by giving up the ungrateful struggle, to reform in every respect their expensive establishment in Manila, and to direct their principal endeavors to carry into effect the project so imperfectly traced out in the new decree of 1803. The opinion of the most vehement enemies of the privileged bodies tacitly approves this exception in their favor. Adam Smith, avowedly hostile to all monopolies, feels himself com-

Profit percent. to go to Spain.

Need of special privileges.
pelled to confess that, "without the incentives which exclusive companies offer to the individuals of a nation carrying on little trade, possibly their confined capitals would cease to be destined to the remote and uncertain enterprises which constitute a commerce with the East Indies."

Spanish commerce in its infancy.

Philippines a burden to Spain.

Profil from
tobacco
monopoly and foreign trade.

Our commerce, compared with that of other nations, notwithstanding what may be said on this subject, is most assuredly yet in a state of infancy. That with Asia, more especially, with the exception of the Royal Company, is almost unknown to all other classes. If it is, therefore, wished to exclude our many rivals from so lucrative a branch of trade as that which constitutes supplies for the consumption of the Peninsula and its dependencies, the means are obvious. The most material fact is in fact already done. The navigation to the various ports of Asia is familiar to the company's navy; their factors and clerks have acquired a practical knowledge of that species of trade, essential to the undertaking, as well as such information as was at first unknown; but, after the great misfortune this body has experienced, it will be indispensably necessary to aid and invigorate them with large supplies of money, following the example of other governments in similar cases; in order that the successful issue of their future operations may compensate their past losses, and worthily correspond with the magnitude of the object.

This Asiatic colony, although considered as conferring great lustre on the crown and name of our monarch, by exhibiting the vast extent of the limits of his dominions, has in reality been, during a long series of years, a true burden to the government, or at least, a possession whose chief advantages have redounded in favor of other powers, rivals of our maritime importance. Notwithstanding all that has been said on the score of real utility, certain it is, that the Philippine establishment has cost the treasury large sums of money; although, within the last twenty-five or thirty years, it must be confessed that the public revenues has experienced a considerable increase, and, of itself, has become an object of some consequence to the state.

Among the various causes which have contributed to produce so favorable an alteration, the chief one have been the establishment of the tobacco monopoly, on behalf of the crown, and the opening of the port of Manila to the flag of other nations, at peace with Spain. The first has considerably increased the entries into the public treasury, and the second has tended to multiply the general mass of mercantile operations, independent of the other beneficial
effects this last measure must have produced in a country, whose resources, trade and consumption had, from the time of the conquest, experienced the fatal shackles imposed by jealousy and ignorance.

The improved aspect the colony soon assumed, by the introduction of this new system, as was natural, awakened the attention of ministers, and induced them more easily to consent to the measures subsequently proposed to them, principally intended to place those distant dominions on a footing of permanent security, so as to enable them to repel any fresh attempts on the part of an enemy. As, however, the productions of the country increased, the public expenses also became greater, although always in a much smaller proportion, with the exception of the interval between the years 1797 and 1802, when the government, fearful of a second invasion, was compelled, at its own expense, to provide against the danger with which these Islands were then threatened. If, therefore, as appears from the official reports of the treasurer-general, Larzabal, in my possession, the receipts at the treasury, in 1780, amounted only to $\$ 700,000$ including the situado, or annual allowance for the expenses of government sent from New Spain, and after the ordinary charges of administration had been paid, a surplus of $\$ 170,000$ remsined in the hands of the treasurer; at present we have the satisfaction to find that the revenue is equal to $\$ 2,625,176.50$ and the expenses do not exceed $\$ 2,179,731.87$ by which means an annual surplus of $\$ 445,444.62$ is left, applicable to the payment of the debt contracted during the extraordinary period above mentioned, now reduced to about $\$ 900,000$ and afterwards transferable to the general funds belonging to the crown.

With regard to the administrative system, it is in every respect similar to the one observed in our governments of America, with this difference only, that, in the Philippine Islands, greater economy prevails in salaries, as well as in the number of persons employed. In former times, the establishment of intendencies, or boards of administration, was deemed expedient in Manila, Ilocos, Camarines, Iloilo, and Cebu; but they were soon afterwards reformed, or rather laid aside, on account of their being deemed superfluous. I would venture to state the grounds on which this opinion was then formed; but, as the sphere in which the king's revenue acts in these Islands increases and extends, which naturally will be the case if the plans and improvements dictated by the present favorable circumstances are carried into effect, I do not hesitate to say that it will be necessary again to appeal to the establishment of a greater number of boards for the management and collection of the various branches

Improvement in public finances.

Economy over SpanishAmerican colonial administration.
of the revenue, whether they are called intendencies, or by any other name; as it will be extremely difficult for the administration to do its duty, on the confined and inadequate plan under which it is at present organized.

Fiscal system.

Opposition to tobacco monopoly.

Under its existing form, it is constituted in the following manner: The governor of the Islands, in his quality of superintendent or administrator general, and as uniting in himself the powers of intendent of the army, presides at the board of administration of the king's revenue, which is placed in the immediate charge of a treasurer and two clerks. The principal branches have their respective general directors, on whom the provincial administrators depend, and the civil magistrates, in the quality of sub-delegates, collect within their respective districts, the tributes paid by the natives in money and produce, and manage everything else relating to the king's revenue. In ordinary cases, the general laws of the Indies govern, and especially are the ordinances or regulations of the Intendents of New Spain (Mexico) ordered to be observed in the Philippines. It ought further to be observed, that, in these Islands, the same as in all the vice-royalties and governments of America, there is a distinct body of royal decrees in force, which, in themselves, constitute a code of considerable size.

The process of converting the consumption of tobacco into a monopoly met with a most obstinate resistance on the part of the inhabitants, and the greatest circumspection and constancy were necessary for the governor, Don José Basco, to carry this arduous enterprise into effect. Accustomed to the cultivation of this plant without any restriction whatever, and habituated to its use from their infancy, it appeared to the people the extreme of rashness to seek simultaneously to extirpate it from the face of the greatest part of the Island of Luzon, in order to confine its culture within the narrow limits of a particular district. They were equally revolted at the idea of giving to a common article a high and arbitrary value, when, besides, it had become one of the first necessity. Every circumstance, however, being dispassionately considered, and the principle once admitted that it was expedient for the colony to maintain itself by means the least burdensome to the inhabitants, it certainly must be acknowledged that, although odious on account of its novelty and defective in the mode of its execution, a resource more productive and at the same time less injurious, could not have been devised. Hence was it that the partisans of the opposite system were strangely misled, by founding their calculation on false
data, when they alleged that a substitute, equivalent to the increased revenue supposed to arise out of the monopoly of tobacco, might have been resorted to by ordering a proportionate rise in the branch of tributes. In fact, no one who had the least experience in matters of this kind, can be ignorant of the open repugnance the natives have always evinced to the payment of the ordinary headtax (cedula), and the broils to which its collection has given rise. Besides, if well examined, no theory is more defective and more oppressive on account of the disparity with which it operates, than this same wrongly-boasted impost; for, however desirous it may be to simplify the method of collecting the general revenue of a state, if the best plan is to be adopted, that is, if public burdens are to be rendered the least obnoxious, it is necessary preferably to embrace the system of indirect contribution, in which class, to a certain degree, the monopoly of all those articles may be considered as included which are not rigorously of the first necessity, and only compel the individual to contribute when his own will induce him to become a consumer.

Let this be as it may, certain it is, that to Governor Basco we are indebted for having doubled the annual amount of the revenue of these Islands, by merely rendering the consumption of tobacco subservient to the wants of the crown. It was he who placed these Islands in the comfortable situation of being able to subsist without being dependent on external supplies of money to meet the exigencies of government. It ought, however, to be remarked that, although they have been in the habit of receiving the annual allowance of $\$ 250,000$ for which a standing credit was opened by the government at home on the general treasury of New Spain, considerable sums have, nevertheless, on various occasions, been remitted from the Philippines to Spain, through the channel of the CaptainGeneral. * * * If these remittances have been suspended for some years past, it has evidently been owing to the imperious necessity of applying the ordinary proceeds of the revenue, as well as other extraordinary means, to unforeseen contingencies arising out of peculiar circumstances.

The planting and cultivation of tobacco are now confined to the district of Gapan, in Pampanga Province, to that of Cagayan, and to the small Island of Marinduque. The amount of the crops raised in the above three points and sold to the king, may, on an average, be estimated at fifty thousand bales, grown in the following proportion: Gapan, forty-seven thousand bales; Cagayan, two thousand, and Marinduque, one thousand. This stock, resold at

## Doubling of

 insular revenue thru tobacco.Totraceo belt.
the monopoly prices, yields a sum equal to about one million of dollars, and deducting therefrom the prime cost and all other expenses, legally chargeable on this branch, the net proceeds in favor of the revenue amount to $\$ 550,000$ or upwards of one hundred twentytwo per cent. This profit is so much more secure, as it rests on the positive fact that, however great the quantity of the article sold furtively and by evading the vigilance of the guards, as the demand and consumption are excessive and always exceed the stock on hand, a ready sale cannot fail to be had for all the stock placed in the hands of the agents of the monopoly. From this it may also be inferred how much the net proceeds of this branch would be increased, if without venturing too far in extending the plantations and consequent purchases, care was taken to render the supplies more proportionate to the consumption; for, by a clear profit of one hundred twenty-two per cent, falling on a larger capital, it follows that a corresponding result would be obtained. In a word, the sales, far from declining or being in any way deemed precarious, are susceptible of a great increase, consequently this branch of revenue merits the serious attention of government beyond all others.

It is, however, to be lamented that, instead of every facility

Defective sales system.

Loss from preventable causes. being given to the sale of tobacco and the consumption thus encouraged, the public meet with great difficulties and experience such frequent obstacles and deficiencies in the supplies, that with truth it may also be said, the sales are affected in spite of the administrators themselves. In the capital alone it is a generally received opinion that a third part more would there be consumed, if, instead of compelling the purchaser to receive the tobacco already manufactured or folded, he was allowed to take it from the stores in its primitive state; and if the minor establishments in the provinces were constantly supplied with good qualities, an infinitely larger quantity might be sold, and by this means a great deal of smuggling also prevented. Such, however, is the neglect and irregularity in this department, that it frequently happens in towns somewhat distant from Manila, no other tobacco is to be met with than what the smugglers sell, and if, perchance, any is to be found in the monopoly stores, it is usually of the worst quality that can be imagined.

I pass over, in silence, the other defects gradually introduced, as evils, in a greater or lesser degree, inseparable from this part of public administration in every country in which it has been deemed necessary to establish monopolies; but I cannot refrain from again insisting on the urgency with which those in power ought to devote themselves, firmly and diligently, to the destruction of abuses which
have hitherto paralyzed the progress of the branch in question, because I am well persuaded, that, whenever corresponding means are adopted, it will be possible in a short time to double the proceeds. What these means are, it is not easy, nor indeed essential, to particularize in a rapid sketch, like this, of the leading features and present state of the Philippine Islands. I shall, therefore, merely remark, that it will be in vain to wish the persons engaged in the management of this department to exert their real zeal and sincerely co-operate in the views of government, as long as they are not placed beyond the necessity of following other pursuits and gaining a livelihood in another way; in a word, unless they have a salary assigned them, corresponding to the confidence and value of the important object entrusted to their charge, no plan of reform can be rendered efficient.

At the same time steps are taken to augment the revenue arising out of tobacco, it would be desirable, as much as possible, to improve the methods used with regard to those whogather in the crops, by endeavoring to relieve them from the heavy conditions imposed upon them; conditions which, besides exposing them to the odious effects of revenue-laws, by their very nature bring upon them many unpleasant consequences, and often total ruin. In order that a correct opinion may be formed of these defects, it will suffice to observe that, under pretext of preventing smuggling, the guards and their agents watch, visit, and, if I may use the expression, live among the plantations from the moment the tobacco-seedlings appear above ground, till the crops are gathered in. After compelling the Fili_ pino planter to cut off the head of the stem, in order that the plant may not become too luxurious, the surveyors then proceed to set down, not only the number of plants cultivated on each estate, but even the very leaves of each, distinguishing their six qualities, in order to call the farmers to account, respectively, when they make a defective delivery into the general stores. In the latter case, they are compelled to prove the death of the plants and even to account for the leaves missing when counted over again, under the penalty of being exposed to the rigor of the revenue laws.

It cannot indeed be denied that by this means two important objects are attained, at one and the same time; the one, the gradual improvement of the tobacco, and the other, the greater difficulty of secreting the article; but, on the other hand, how great are the inconveniences incurred? Independent of the singularity and consequent oppression of a regulation of this kind, as well as its too great minuteness and complication, it is attended with very consider-

Abuses by revenue officers.

Burdensome and unprofitable inspection.
able expenses, and renders it necessary to keep on foot a whole army of guards and clerks, who tyrannize over and harass the people without any real motive for such great scrupulosity and profusion. I make this observation because I cannot help thinking that the same results might nearly be obtained, by adopting a more simple and better regulated system. I am not exactly aware of the one followed in the Island of Cuba, but as far as I understand the matter, it is simply reduced to this: the growers there merely present their bales to the inspectors, and if pronounced to be sound and good, the stipulated amount is paid over to them; but if the quality is bad, the whole is invariably burnt. Thus all sales detrimental to the public revenue are prevented, and I do not see why the same steps could not be taken in the Philippine Islands. It must not, however, be understood, that I presume to speak in a decisive tone on a subject so extremely delicate, and that requires great practical information, which, I readily acknowledge, I do not possess. I merely wish by means of these slight hints, to contribute to the commencement of a reform in abuses, and to promote the adoption of a plan that may have for basis the relief of the growers, and at the same time advance the prosperity of this part of the royal revenue.

The monopoly of coco and nipa, or palm-wine, is a branch of public revenue of sufficient magnitude to merit the second place among the resources rendered available to the expenditure of these Islands, converted into a monopoly some years ago. In like manner as the consumption of tobacco, it has experienced several changes in its plan of administration, this being at one time carried on, for account of the king, at others, by the privilege being let out at auction; till at length the Board of Control, convinced of the great profit gained by the contractors, resolved at once to take the direction of this departure under their own charge, and make arrangement for its better administration. Having with this view established general deposits and licensed houses for the sale of native wine, with proper superintending clerks they soon began to reap the fruits of so judicious a determination. In 1780, the privilege of selling the coco and nipa wine was farmed out, to the highest bidder, for no more than $\$ 45,200$ and subsequently the increase has been so great, owing to the improvements adopted, that at present net proceeds equal to $\$ 200,000$ on an average may be relied upon. In proof of this, the proceeds of this branch, in the year 1809, may be quoted, when the total balances received at the Treasury, after all expenses had been paid, amounted to $\$ 221,426$, in the following manner:
$\begin{array}{llr}\text { Administration of Manila and district. . . . . . . . . . . . . . . . . . } & \$ 201,250 \\ \text { Administration of La Pampanga and district. . . . . . . . . } & 12,294 \\ \text { Administration of Pangasinan and district. . . . . . . . . . } & 7,882\end{array}$
$\$ 221,426$

The prime cost and other expenses that year amounted to no more than $\$ 168,557$ by which means, on the whole operation, a net profit of thirteen and one-half per cent. resulted in favor of the treasury.

The monopoly of native wine comprehends the whole of the Island of Luzon, excepting the Provinces of Cagayan, Zambales, Nueva Ecija, Camarines and Albay, and is under the direction of three administrators, who act independently of each other in their respective districts, and have at their disposal a competent number of guards. These administrators receive in the licensed establishments the coco and nipa wines, at prices stipulated by the growers. That of the coco is paid for at the rate of two dollars per jar, containing twenty gantas, equal to twelve arrobas, seven azumbres and half a cuartillo, Castillan measure, and at fourteen reals in the places nearest the depots. The nipa wine is laid at six and one-half reals the jar, indistinctly; prices which, although extremely low, are still considered advantageous by the Filipinos themselves, more particularly when it is besides understood, that, from the circumstance of their being growers of this article, they are exempted from military service, as well as several other taxes and public charges.

The coco-wine is a weak spirit, obtained in the following manner: The tree that produces this fruit is crowned by an assemblage of large flowers or corollas, from the center or calix of which issues a fleshy stem, filled with juice. The Indian cuts the extremity of this stem, and inclining the remainder in a lateral manner, introduces it into a large hollow tube which remains suspended, and is found full of sweet and sticky liquor, which the tree in this manner yields twice in every twenty-four hours. This liquid, called tuba, in the language of the country, is allowed to ferment for eight days in a large vessel, and afterwards distilled by the Indians in their uncouth stills, which are no other than large boilers, with a head made of lead or tin, rendered tight by means of clay, and with a pipe frequently made out of a simple cane, which conveys the spirit to the receiving vessels, without passing, like the serpentine tube used in ordinary stills, through the cooling vats, which so greatly tends to correct the vices of a too quick evaporation. The tuba, obtained in level and hot situations, is much more spirituous than that produced in cold and shady places. In the first, six jars of juice are sufficient to yield one of spirit, and in the latter, as many as eight are requisite; a much greater number, however, would be wanted to rectify this spirit so as to render it equal to what is usually known by Hollands proof. I am not positively certain what degree of strength the coco-brandy,

Wine monopoly district.

[^192]or as it is usually called coco-wine, possesses, but it is evidently inferior to the weakest made in Spain from the juize of the grape. The only circumstance required for it to be appr ved of, and received into the monopoly-stores, is its being easily ignited by the application of a lighted candle.

The nipa is a small tree of the class of palms, which grows in a very bushy form, and multiplies and prospers greatly on the margins of rivers and watery tracts of land. The tuba, or juice, is extracted from the tree whilst in its flowering state, in the same way as that of the coco, and afterwards distilled by a similar process; butitismore spirituous, from six to six and a half jars being sufficient to yield one of wine. The great difference remarked in the prices of these two species of liquor, arises out of the great number of uses to which the fruit of the cocal or coco tree is applicable, and the increase of expense and labor requisite to obtain the juice, owing to the great height of the plant, and the frequent dangers to which the caritones, or gatherers, are exposed in passing from one tree to another, which they do by sliding along a simple cane (bamboo).

The impost on, or rather monopoly of, native wine, is in itself little burdensome to the community, as it only falls on the lower and most dissipated orders in society, and for this reason it is not
 susceptible of the same increase as that of tobacco, of which the use is more general, and now become an object of the first necessity. The native of the Philippine Islands is, by nature, so sober, that the spectacle of a drunken man is seldom noticed in the streets; in the capital, where the most corrupt classes of them reside, it is admirable to see the general abstinence from a vice that degrades the human species. The consumption of the coco and nipa wine is, nevertheless, considerable, for it is used in all their festivities, cockfights, games, marriages, etc. Accordingly if it is desired to augment the annual sale of these liquors, no way could be more efficient than to increase the number of their festive meetings, and seek pretexts to encourage public diversions, so long as these do not go contrary to the well-regulated order of society, and conflict with the duties of those who are intrusted with its superintendence.

I am still of opinion, however, that, without resting the prosperity of this branch of the public revenue on principles possessed of so immoral a tendency, it might be rendered more productive to the treasury, if the monopoly could be introduced into the other districts adapted to its establishment. By this I mean to say that, as hitherto the monopoly has been partial, and enforced more in the way of a trial than in a general and permanent manner, much
remains to be done, and consequently great scope is left for improvement in this department of the public revenue. This most assuredly may be attained, if all the local circumstances and impediments, more or less superable, which the matter itself presents, are only taken into due account, and proper exertions made to study and discover the various indirect means of increasing the total mass of contributions, by applying a system more productive and analogous to the nature of the Philippine Islands. With regard to the revenue of the two particular articles above treated on, I merely wish to make it understood that, far from introducing by means of the monopoly, a new vice into the provinces in which I recommend its establishment, it would rather act, in a certain degree at least, as a corrective to pre-existing evils, and the government would derive advantages from an article of luxury, by subjecting its consumption to the same shackles under which it stands in the northern provinces, where its administration is established and carried on for account of the royal treasury.

In former times, when only vessels belonging to the Asiatic nations visited the port of Manila, with effects from the coast of Coromandel, or the China junks, and now and then a Spanish vessel coming from or going to the Island of Java, with spices for account of Philippine merchants, the receipt of duties was left in charge of a single royal officer, and the valuations of merchandise made by him, in concert with two merchants named by the government; but with the knowledge and assistance of the king's attorney-general. The modifications and changes which have subsequently taken place in this department have, however, been frequent, as is evidently shown by the historical extract from the proceedings instituted before the Council of the Indies, by the merchants of Seville and Cadiz, in opposition to those of the Philippine Islands, printed in Madrid, 1736, in folio, by order of the said council; but as it does not enter into my views to speak of times so remote, I shall confine my remarks to this branch considered under its present form.

In conformity to royal orders of March 15 and May 5, 1786,

Former customs usage.

Custom house. the Royal Custom House of Manila was definitively organized on its new plan; and from 1788, was placed under the immediate charge of an administrator-general, a controller, a treasurer, aided by a competent number of guards, inspectors, etc., and in every respect regulated on the plan established in the other custom houses. The freedom of the port being granted to foreign nations, a privilege before enjoyed only by those purely Asiatic, and a new line of
trade commenced by the company, the competition in merchandise soon began to increase, as well as the revenue arising therefrom, in such manner that, although the exportation of goods was limited to the cargo of the Acapulco ship, of which the duties are not payable till her arrival there; notwithstanding also the property imported by the company from China and India, and destined for their own shipments, was exempt from duties, and above all, the continual interruptions experienced by the maritime commerce of the Islands within the last fifteen or twenty years, the net proceeds of the custom house, from the period above mentioned of its establishment, till the close of 1809, have not been less than from $\$ 138,000$ to $\$ 140,000$, on an average, independent of the amount of the king's fifth on the gold of the country, which is collected by the same administrator, in consequence of its being trivial; as well as the two per cent. belonging to the Board of Trade, and by them collected under that title, and afterwards separately applied to the average-fund and which usually may be estimated from $\$ 20,000$ to $\$ 25,000$.

The general duties now levied in the custom house, are the following:

Port charges and duties.

Six per cent. almojarisfago is on all kinds of merchandise imported in foreign bottoms, under a valuation made by the surveyors, in conformity to the respective prices of the market at the time on importation; it usually is regulated by an increase of $50 \%$ on the prime cost of India goods, and of $331 / 3 \%$ on those from China. This duty may be considered as, in fact, equal to nine per cent on the former, and eight on the latter.

Six per cent, or the same duty, on all foreign goods, although imported in national bottoms.

Three per cent on Spanish goods, imported under the national flag, equal, according to the above estimate to 4 and $41 / 2 \%$.

Two per cent Board of Trade duty, indistinctly on all foreign property, equivalent to $21 / 2$ or $3 \%$.

Twenty-five per cent anchorage dues, levied on the total amount of the almojarisfago duty.

An additional of two and one-half per cent, a new and temporary duty, called subvencion, appropiated to the payment of the loan made to the king by the Cadiz Board of Trade, and leviable on all kinds of imported goods, and, of course, equal, according to the usual mode of valuation, to about three per cent.

Three per cent on the exportation of coined silver and gold of the country, in dust and, ingots.

An additional or duty of subvencion, or temporary duty on the above, equal to one-half per cent.

One and a half per cent under the same rate, on all kinds of goods, and equal to two or two and one half per cent.

One and one-half per cent on the amount of the cargo of the Acapulco ship, on leaving the port of Manila, equal to $3 / 4 \%$ on the real prime cost.

The company are considered in the same light as the rest of the merchants, in the graduation and payment of duties, on such goods as they sell out of their own stores for local consumption,

Slight concession to the Company. with the exemption only of the Board of Trade rate of $2 \%$ and $3 \%$, on the exportation of silver, according to a special privilege, and in conformity to the 61st Article of the new royal decree of 1803.

Besides the duties above enumerated, there is another trifling one established for local purposes of peso merchante, being a rate for the use of the king's scales, levied according to an extremely equitable tariff, on certain articles only of solid weight, such as iron, copper, etc. The raw materials as well as all kinds of manufactured articles, belonging to the Islands, are exempt from duties on their entry in the port and river of Manila; but some of the first are subject to the most unjust of all exactions, that is, to an arbitrary tax and to the obligation of being retailed out on board the vessels in which they have been brought down, and deliverable only to persons bearing a written order, signed by the sitting members of the municipal corporation. Among this class of articles may be mentioned the coco of Cebu and the wax and oil of the Bisayas, which are rated as objects of the first necessity.

With regard to the respective duties on the cargo annually dispatched by the merchants of Manila to New Spain, the practice is tolerably well regulated. An extreme latitude is given to the moderate rates at which it is ordered to value the goods contained in the manifest, by which means these are frequently put down at only one-half of their original prime cost; the commission to frame the scale of valuations which is to be in force for five years, after which time it is renewed, being left to three merchants, and made subject to the revision of the king's attorney-general (fiscal) and the approbation of the governor; consequently, such being the nature of the tariff on which these operations are founded, the $331 / 3 \%$ to which the royal duties amount on the $\$ 500,000$ stipulated in the permit, does not, in fact, affect the shipper beyond the rate of 15 per cent, in consequence of the great difference between the prime cost and

Undervaluation of galleon goods.
valuation of the articles corresponding to the permit; or, what is the same thing, between the $\$ 500,000$ nominal value, and $\$ 1,100,000$ or $\$ 1,200,000$, the real amount of the cargo in question. The most remarkable circumstance, however, is, that the officers of the revenue in Acapulco collect the above-mentioned $331 / 3 \%$ in absolute conformity to the Manila valuation, and not according to the value of the goods in America, and without any other formality than a comparison of the cargo with the ship's papers. In honor of truth, it ought to be further observed that, although the Manila merchant by this means seeks to exempt himself from the part of the enormous duties with which it has been attempted to paralyze the only commercial intercourse he carries on with New Spain, in every other respect connected with this operation, he acts in a sufficiently legal manner, and if at their return those vessels have been in the habit of bringing back near a million of dollars in a smuggled way, it must be acknowledged that it is the harshness of the law which compels the merchant to become a smuggler; for according to the strange regulation by which he is thwarted in the returns representing the proceeds of his outward operation, he must either bring the money to the Philippine Islands without having it declared on the ship's papers, or be obliged to leave the greatest part of it in the hands of others, subject to such contingencies as happen in trade. As long, therefore, as the present limitations subsist, which only authorize returns equal to double the value of the outward-bound cargo, this species of contraband will inevitably continue. The governors also, actuated by the principles of reason and natural justice, will, as they have hitherto done, wink at the infraction of the fiscal laws; a forbearance, in fact, indirectly beneficial to them, inasmuch as it eventually contributes to the general improvement of the colony. Indeed, without this species of judicious condescension, trade would soon stand still for the want of the necessary funds to carry it on.

Unbusinesslike customs ways.
. . . . It will readily be acknowledged that, in like manner as the good organization of custom houses is favorable to the progress of general commerce, so nothing is more injurious to its growth and the enterprise of merchants, than any uncertainty or arbitrary conduct in the levying of duties to be paid by them. This arises out of the circumstance of every merchant, entering on a new speculation, being anxious to have, as the principal ground work of his combinations, a perfect knowledge of the exact amount of his disbursements, in order to be enabled to calculate the final result with some degree of certainty. Considered in this point of view, the system adopted in the Islands is certainly deplorable, since it must be acknowledged
that the principles and common rules of all other commercial countries, are there unknown. For example; this year a cargo arrives from China or Bengal, and the captain turns in his manifest. The custom-house surveyors then commence the valuation of the goods of which his cargo is composed: I say they commence, because it is a common thing for them not to have finished the estimate of the scale and amount of corresponding duties, till the expiration of two, four, and not unfrequently six months. The rule they affect to follow, in this valuation, is that of the prices current in the market, and in order to ascertain what these are, they are seen going round inquiring in the shops of the Sangleys (Chinese), till at length, finding it useless to go in search of correct and concurrent data, in a place where there are neither brokers nor public auctions, they are forced to determine in an arbitrary manner, and as the adage goes, always take good care to see their employers on the right side of the hedge. The grand work being ended, with all this form and prolixity, the sentence of the surveyors is irrevocable. The bondsman of the captain, who, in the meanwhile, has usually sold his cargo and departed with a fresh one for another destination, pays in the amount of the duties, thus regulated by law.

The practical defects and injurious consequences of such a system as this, it would be unnecessary to particularize. It would, however, be less intolerable, if, once put in force, it could serve the merchant asaguide in the valuations of his property for a determined number of successive years. What, however, renders this assessment more prejudicial, is its instability and uncertainty, and the repetition of the same operation I have just described every year, and with every cargo that arrives; but under distinct valuations, according to the reports or humor of the day. Besides these great defects and irregularity, the Philippine custom house observes the singular practice of not allowing the temporary landing of goods entered in transitu and for re-exportation, as is done on the bonding system in all countries where exertions are made by those in authority for the extension and improvement of commerce in every possible way. Of course, much less will they consent to the drawback or return of any part of the duties on goods entered outwards, even though they are still on board the very vessels in which they originally came shipped. Beyond all doubt, the wrongly understood severity of such a system, has, and will, continue to prevent many vessels from frequenting the port of Manila, and trying the market, unable to rely on the same liberal treatment they can meet with in other places.

The areca-nut

Buyo monopoly unsatisfacory

Hardships on areca-nut planters.

The bonga, or areca-nut, is the fruit of a very high palm-tree, not unlike the one that bears the date, and the nuts, similar to the latter, hang in great clusters from below the protuberance of the leaves or branches. Its figure and size resemble a common nut, but solid, like the nutmeg. Divided into small pieces, it is placed in the center of a small ball made of the tender leaves of the buyo or betel pepper, lightly covered with slacked lime, and this composition constitutes the celebrated betel of Asia, or, as it is here called, the buyo, the latter differing from that used in India, inasmuch only as it contains cardamomom.

The government, anxious to derive advantage in aid and support of the colony, from the great use the inhabitants make of the buyo, many years ago determined to establish the sale of the bonga, its principal ingredient, into a monopoly, either by hiring the privilege out, or placing it under a plan of administration, in the form in which it now stands. Both schemes have been tried, but neither way has this branch been made to yield more than $\$ 30,000$; indeed the annual proceeds usually have not exceeded $\$ 25,000$. In 1809 , the total amount of sales was $\$ 48,610$, and deducting from this sum the prime cost and expenses of administration, the net profit in favor of the treasury was equal to no more than $\$ 27,078$ or upwards of $1251 / 2 \%$. In 1780, the privilege of selling the bonga was let out at public auction for the sum of $\$ 15,765$ and this, compared with the present proceeds,clearly shows that, although the increase has not advanced equally with the other branches of the revenue, it is far from having declined. It must nevertheless be confessed, that on the present footing on which it stands, the smallness of the proceeds is not worth the trouble required in the collection, and even if the amount were still greater, it could never serve as an excuse for the oppression and violence to which this monopoly frequently gives rise.

As the trees producing the bonga are not confined to any particular grounds, and indiscriminately grow in all, the plan has been adopted of compelling the Filipinos to gather and bring in the fruit, raised on their lands, to the depot nearest the district in which they reside. There they are paid from two, two and one-half, three and three and one-half reals per thousand, according to the distance from which they come: and, in order to prevent frauds, the surveyors belonging to the revenue go out, at certain times of the year, to examine the bonga plantations, and the trees being counted, they estimate the fruit, that is, oblige the proprietor to undertake to deliver in two hundred nuts for each bearing tree, whether or not,
hurricanes deteriorate or destroy the produce, or thieves plunder the plantations, as very frequently happens. In case deficiencies are proved against him, he is compelled to pay for them in money, at the rate of twenty-five reals per thousand, the price at which the king sells them in the monopoly-stores. Besides, the precise condition of delivering in two hundred bonga nuts, according to the stipulations imposed upon him, presupposes the previous exclusion of all the injured or green ones; and although the ordinary trees usually yield as many as three hundred nuts each, great numbers are nevertheless spoiled. If, to the adverse accidents arising out of the storms and robberies, we add the effects of the whims or ill-humor of the receivers, it is not easy to imagine to what a length the injuries extend which befail the man who has the folly or misfortune to become a planter of this article.

On the other hand, as in the conveyances from the minor to the larger depots, frauds are frequently committed, and the heaping together of many millions of nuts inevitably produces the fermentation and rapid putrefaction of agreat number of them, it consequently follows that the waste must be immense; or if it is determined to sell all the stock laid in, without any distinction in quality and price, the public must be very badly served and displeased, as in fact too often happens. Since, therefore, the habit of using the buyo is still more prevailing than that of tobacco, when suitable supplies cannot be had in the monopoly stores, the consumer naturally resorts to the contraband channels, although he encounters some risk, and expends more money. It is also very natural that the desire of gain should thus lead on and daily expose a number of needy persons, anxious by this means to support and relieve the wants of their families. Returning, however, to what more immediately concerns the grower, I do not know that the oppressive genius of fiscal laws has, in any country of the globe, invented one more refinedly tyrannic, than to condemn a man, to a certain degree at least, as has hitherto been the case, to the punishment of Tantalus; for the law forbids the Filipino to touch the fruit of the tree planted with his own hands, and which hangs in tempting and luxuriant abundance round his humble dwelling.

It would be easy for me to enumerate many other inconveniences attending this branch of public revenue, on the footing on which it

Folly of monopoly plan. now stands, if what has already been said did not suffice to point out the necessity of changing the system, as those in authority are anxious that the treasury should gain more, and the king's subjects suffer less. The strong prejudice entertained against this source
of revenue, the inconsiderable sum it produces, and the complicated form of its organization, have in reality been sufficient motives to induce many to become strenous advocates for the total abolition of the monopoly. I do not, however, on this account see any reasons for altogether depriving the government of a productive resource, as this might soon be rendered, if it was placed under regulations less odious and more simple in themselves. I nevertheless agree, that the perfect monopoly of the areca fruit, or bonga, is impracticable, till the trees, indiscriminately planted, are cut down, and, in the same way as the tobacco plantations, fresh and definite grounds are laid out for its cultivation, on account of the revenue. I am further aware that this measure is less practicable than the first; for, independent of all the other obstacles, it would be necessary to wait till the new plantation yielded fruit, and also that the public should consent to refrain from masticating buyo in the meanwhile, a pretension as mad as it would be to require that the eating of salt should be dispensed with for a given number of years. But what difficulty would there be, for example, in the proprietors paying so much a year

Tree-tax preferable. for each bonga tree to the district magistrate, the governor of the nearest town, or the cabeza de Barangay, or chiefs of the clans into which the natives are divided, in the same manner as the Filipino pays his tribute? The only one I anticipate is that of fixing the amount in such way that, at the same time this resource is made to produce an increased income of some moment, it may act as a moderate tax on an indefinite property, the amount of which, augmented in the same price, may be reimbursed to the proprietor by the great body of consumers. It is not in fact easy to foresee or estimate, by any means of approximation, the alteration in the current price of the bonga, that would result from the indefinite freedom of its cultivation and sale, especially during the first years. Although, for this reason, it would be impossible to ascertain what proportion the impost on the tree would then bear with regard to the value of the fruit, the error that might accrue would be of little moment, as long as precautions were taken to adopt a very low rate of comparison, and a proportionably equitable one as the basis of taxation. Supposing then that the price of the bonga should decline from twenty-five reals, at which it is now sold in the monopoly stores, to fifteen reals per thousand, in the general market, and a tax of one-fourth real should be laid on each tree valued at two hundred bonga nuts, it is clear that this would be equal to no more than $81 / 2 \%$; or, what is the same, the tax would be in the proportion one to twelve with the proceeds of each tree, and the more the
value of the fruit was raised, the more would the rate of contribution diminish. It ought at the same time to be observed that, under the above estimate, that is, supposing the price of the article to remain at fifteen reals, the $81 / 2 \%$ at which rate the tax is regulated, would not perhaps exceed five or six per cent on a more minute calculation; in the first place, because at the time of making out the returns of the trees, those only ought to be set down which are in their full vigor, excluding such as through the want or excess of age only yield a small proportion of fruit; and in the second, because in the numbers registered, the trees would only be rated at two hundred although it is well known they usually yield three hundred, in order by this means the better to avoid all motives of complaint. In this point of view, and by adopting similar rules of probability, it seems to me that the government would not risk much by an attempt to change the present system into a tax levied on the tree itself, on a plane similar to the one above proposed; more particularly by doing it in a temporary manner, and rendering it completely subservient to the corrections subsequent experience might suggest in this particular.

The difficulty being, in this manner, overcome, with regard to the prudent determination of the rate at which the proprietor of the bonga plantations ought to contribute, let us now proceed to estimate, by approximation, the annual sum that would thus be obtained. As, however, this operation is unfortunately complicated, and in great measure depends on the previous knowledge of the total number of trees liable to the tax proposed, details with which we are at not present prepared, it is impossible to come at any very accurate results. All that can be done is to endeavor to demonstrate, in general terms, the great increase the revenue would experience by the adoption of the new plan, and the real advantage resulting from it to the contributors themselves, all which may be easily deduced from the following calculation.

Let us, in the first instance, suppose that the consumers of buyo, in the whole of the Islands, do not exceed one million of persons, and that each one makes use of three bongas per day, this consumption, at the end of the year, would then amount to $1,095,000,000$ nuts. We will next divide this sum by two hundred, at which the product of each tree, one with another, is rated, and the result will be $5,475,000$ trees. This number being taxed at the rate of onefourth real, would leave the sum of $\$ 171,093.75$ and deducting therefrom the $\$ 25,000$ yielded by this branch under its present establishment, together with $\$ 5,132$ equal to three per cent paid

Exemption of immature and aged trees.

Difficulty of estimating probable revenue.

Greater, however, than at present.
to the district magistrates for the charges of collection, we should still have an annual increase in favor of the, treasury equal to \$140,961.75.

It might perhaps be objected that, in this case, the proprietor, instead of receiving, as before two and one-half reals for every thousand bongas, would have to disburse one and one-fourth reals

T'ax only a surcharge ultimately paid by consumer

Estimate conservative.

## Advantages.

 stance which, at first sight, seems to produce a difference not of one and one-fourth, but of three and one-fourth reals per thousand against him; though in reality far from this being the case, if we take into consideration the deficiencies the sworn receiver usually lays to his charge, the fruit he rejects, owing to its being green or rotten, and the many and expensive grievances he is exposed to in his capacity of grower; it will be seen that his disbursements under these heads frequently exceed the amount he in fact has to receive. If, in addition to this, we bear in mind that, on condition of seeing himself free from guards and a variety of insupportable restrictions, constituting the very essence of a monopoly, he would in all probability gladly pay much more than the tax in question, all the doubts arising on this point will entirely disappear. Finally, considered in its true light, we shall not find in the measure above described anything more than a very trifling discount required of the proprietor from the price at which he sells his bonga, and which, as already noticed, ultimately falls on the consumer alone.The moderate estimate I have just formed ought to inspire the more confidence from its being well known that the use of the buyo is general among the inhabitants of these Islands. The calculation, as it now stands, rests only on one million consumers, for each of whom I have only put down three bongas per day, whereas it is customary to use much more; nor have I taken into account the infinite number of nuts wasted after being converted into the buyo, a fact equally well known. Indeed, as the object proposed was no other than to prove the main part of my assertions, and I trust this is satisfactorily done, I have not deemed it necessary to include in the above calculation a greater number of minute circumstances, nor attempt to deduce more favorable results, which, with the scope before me, I was most assuredly 'warranted in doing.

In a word, from the concurrence of the facts and reasons above adduced, the following propositions may, without any difficulty, be laid down. First, that the increase of revenue produced by the reform in question, would in all probability exceed $\$ 150,000$ per annum; secondly, that the Filipinos would soon comprehend, and gladly consent to a change of this kind in the mode of contributing of which the advantages would be apparent; thirdly, that the persons employed in the old establishment, might, with greater public
utility, be applied to other purposes; and lastly, that the civil magistrates would not be harassed with so many strifes and lawsuits, and so many melancholy victims of the monopoly, and its officers would cease to drag a wretched existence in the prisons and places of hard labor in these Islands.

The cock-pit branch of the revenue is hired out by the government, and the license is separately set up at auction for the respective provinces. Its nature and regulations are so well known that they do not require a particular description, the general obligations of the contractors being the same as those in New Spain. Perhaps the only difference observed in this public exhibition in the Philippine Islands consists in its greater simplicity, owing to its being frequented only by the natives, the whites who are present at this kind of diversion being very few, or indeed none.

The cock-pits are open two days in the week, and the lessees of them receive half a real from every person who enters, besides the extra price they charge those who occupy the best seats, the owners of the fighting cocks, for the spurs, stalls for the sale of buyo, refreshments, etc. Notwithstanding all this, and although cockfighting is so general and favorite an amusement among these people (the rooster may justly be considered as the distinctive emblem of the Filipino) the annual proceeds of this branch are inconsiderable; although it must be acknowledged that it has greatly increased since the year 1780, when it appears the license was let at auction for only about $\$ 14,000$ owing, no doubt, to the exclusive privilege of the contractors not having been extended to the provinces, as was afterwards gradually done.

The total sum paid to the government by the renters of this branch, according to the auction returns in 1810 , amounted to $\$ 40,141$

Cockpit licenses.

Inconsiderable income. in the following order for the provinces:

| Tondo | \$18,501 |
| :---: | :---: |
| Cavite | 2,225 |
| La Laguna | 2,005 |
| Pampanga. | 3,000 |
| Bulacan. | 6,900 |
| Batangas. | 2,000 |
| Pangasinan. | 1,200 |
| Bataan | 1,050 |
| Iloilo | 1,600 |
| Ilocos. | 600 |
| Tayabas | 400 |
| Cebu. | 360 |
| Albay.. | 300 |
| Total | \$40,141 |

Possibilities of increase.

The causes, to which the increase that has taken place within the last twenty-five or thirty years is chiefly to be attributed, have already been pointed out, and for this reason it would appear that, by adopting the same plan with regard to the fourteen remaining provinces, of which this captaincy-general is composed, hitherto free from the imposition of this tax, an augmentation might be expected, proportionate to the population, their circumstances, and the greater or lesser taste for cock-fights prevailing among their respective inhabitants. At the commencement, no doubt, the rentals would be low, and, of course, the prices at which the licenses were let out, would be equally so; but the experience and profits derivable from this kind of enterprises would not fail soon to excite the competition of contractors, and in this way add to the revenue of the government. This is so obvious that I cannot help suspecting attempts have, at some period or other, been made to introduce the establishment of this privilege, in some of the provinces alluded to; at the same time I am persuaded that, owing to the affair not having been viewed in its proper light, seeking on the contrary to obtain an immediate and disproportionate result, the authorities have been too soon disheartened and given up the project without a fair trial. All towns and districts murmur, and, at first object, to taxes, however light they may be; but, at length, if they be not excessive, the people become reconciled to them. The one here proposed is neither of this character, nor can it be deemed odious on account of its novelty. The natives are well aware that their brethren in the other provinces are subject to it, and that in this nothing more is done than rendering the system uniform. I, therefore, see no reason why the establishment of this branch of revenue should not be extended to all the points of the Islands. At the commencement, let it produce what it may, since constancy and time will bring things to the same general level.

The too great condescension and mistaken humanity of the government on the one hand, and the fraud and selfishness of the provincial sub-delegates or collectors, on the other, have concurred to change a contribution, the most simple, into one of the most complicated branches of public administration. The first cause has been owing to a too general acquiescence to receive the amount of tributes in the produce peculiar to each province, instead of money; and the second, because as the above officers are the persons intrusted with the collection, whenever the sale has held out to them any advantage, they have been in the habit of appropriating the severa ${ }^{1}$
articles to themselves, without allowing any benefit to the treasury. If the prospective sales of the produce appear unfavorable, it is then forwarded on to the king's store in Manila, surcharged with freights, exposed to many risks, and the value greatly diminished by waste and many other causes. No order or regularity being thus observed in this respect, and the sale of the produce transmitted to the king's stores being regulated by the greater or lesser abundance in the general market, and a considerable stock besides left remaining, from one year to another, and eventually spoiled, it is impossible to form any exact estimate of this branch. If to these complicated matters we add the radical vices arising out of the infidelity of the heads of clans (cabezas de barangay), the difficulty of ascertaining the defects of the returns made out by them, the variations annually occurring in the number of those exempted either through age or other legal motives, and above all, the frequently inevitable tardiness with which the district magistrates send in their respective accounts, it will be readily acknowledged, that no department requires more zeal in its administration, and no one is more susceptible of all kinds of frauds, or attended with more difficulties.

In this state of uncertainty, with regard to this particularbranch, I have guided myself by the last general return of tributes, made out

A conserrative estimate. in the accountant-general's office, on the best and most recent data, and calculating indistinctly the whole value in money, I have deemed it proper afterwards to make a moderate deduction, on account of the differences above stated, and arising out of the collection of the tributes in kind, the expenses of conveyance, shipwrecks, averages, and other causes already enumerated.

In conformity to this calculation, the total proceeds of this Fixet churpes. branch of revenue amount to $\$ 506,215$ from which sum are deducted, in the primitive stages of the accounts, the amount of ecclesiastical stipends, the pay of the troops under the immediate orders of the chief district magistrates in their quality of war-captains, together with all other extraordinary expenses incurred in the provinces by orders of the government, the remainder being afterwards forwarded to the king's treasury. It ought, however, to be observed, that the above aggregated sum is more or less liable to deficiencies, according to the greater or lesser degree of punctuality on the part of the subcollectors in making up accounts, and the solidity of their respective sureties; the failure of this kind experienced by the revenue being so frequent, that, according to the returns of the accountant-general, those which occurred between the years 1762 and 1809, were no less than $\$ 215,765$ notwithstanding the great precautions at all times
taken to prevent such considerable injuries, by every means compatible with the precarious tenure of property possessed by both principals and sureties in this country. All the above circumstances being therefore taken into due consideration, and the ordinary and extraordinary discounts made from the total amount of tributes, the real sum remaining, or the net annual proceeds of the above branch, have usually not been rated at more than $\$ 190,000$ and $\$ 200,000$; a sum respectively extremely small, and which possibly might be doubled, without the necessity of recurring to any other measure than a standing order for the collecting of the tributes in money, as by this means the variety of expenses and complications above enumerated, would be avoided, and the king's revenue no longer exposed to any other deficiencies than those arising out of the insolvency of the sub-collectors and their sureties, or casual risks, and the trifling charges paid for the conveyance of the money. If in opposition to this it should be alleged that it would be advisable to except some of the provinces from this general rule, owing to the advantages the government might derive from certain tributes being paid in kind, I do not hesitate to answer that I see no reason whatever why this should be done, because, if, for example, any quality of rigging or sail cloth is annually required, it would be easy to obtain it either by early contracts, or by laying in the articles at the current market price. Indeed, all supplies which do not rest on this footing, would be to defraud the natives of the fruits of his industry, and in the final result this would be the same as requiring of him double or triple tribute, contrary to the spirit of the law, which unfortunately is too frequently the case under the existing system.

Considering this affair in another point of view, it would be

Preferability of tribute in money. easy for me to demonstrate, if it were necessary, the mistaken idea that the native is benefited by receiving in kind the amount of the tribute he has to pay, at the low prices marked in the tariff used as a standard, by showing the extortions and brokerage, if I may so term it, to which the practice gives rise on the part of the district collectors. It will, however, suffice to call the attention of my readers to the smallness of the sum constituting the ordinary tribute, when reduced to money, in order for them to be convinced that it would be superfluous, as well as hazardous, to attempt to point out how this branch might be rendered more productive to the state and at the same time less burdensome to the contributors, more particularly when the rate assessed does not exceed ten reals per year, a sum so small, that generally speaking, no family can be found unable to hoard it up, if they have any inclination so to do.

The prevailing error, however, in this respect, I am confident arises out of a principle very different from the one to which it is usually attributed. The tributary native is, in fact, disposed to pay the quota assigned to him into the hands of the chief of his clan, in money, in preference to kind; because, independent of the small value at which the articles in kind are rated in the tariff, he is then exposed to no expenses, as he now is for the conveyance of his produce and effects; nor is he liable to so many accidents. But as the chief of each clan has to deliver in his forty or fifty tributes to the head magistrate, who is answerable for those of the whole province, it is natural for him to endeavor to make his corresponding payments in some equivalent affording him a profit; at the same time the provincial magistrate, speculating on a larger scale, on the produce arising out of his jurisdiction, seeks to obtain from the government a profitable commutation in kind for that which the original contributor would have preferred paying in money. In order the better to attain his purpose, he asserts, as a pretext, the impossibility of collecting in the tribute under another form, alleging, moreover, the relief the native derives from this mode, whereas, if only duly examined, such a pretence is founded on the avarice, rather than the humanity of the magistrate.

Leaving to one side the defects attributable to the present mode of collection, and considering the tribute as it is in itself, the attentive observer must confess, that in no part of our Indies is this more moderate; and, indeed, it is evident that the laws generally relating to the natives of these Islands seem to distinguish them with a decided predilection above those of the various sections of America.

The tribute in its origin was only eight reals per family; but the necessity of providing for the increased expenses of the gov-

## Items in

 tribute. ernment gave rise to this rate being afterwards raised to ten. The Sangley mestizos pay double tribute, and the Sangleys contribute at the rate of $\$ 6$ per head. Besides this, all pay a yearly sum, applicable to the funds belonging to the community, and the above two casts pay three reals more, as a church rate, and under the name of the Sanctuary, the whole being in the following form:| Entire Native Tribute | Tribute of Mestizos | Sangleys |
| :---: | :---: | :---: |
| 8 Reals, original tribute | 16 Reals. | \$6 each. |
| 11/2 Reals for expenses of troops.. | 3 |  |
| $1 / 2$ Real to tithes... | 1 |  |
| 10 Reals, amount of tribute. | 20 Reals. | \$6.75 |
| 1 Real, community funds. . | 1 |  |
| 3 Reals, sanctuary rate. . | 3 |  |
| 14 Reals, total annual disbursement. | 24 Reals. | \$6.75 |

The males commence paying tribute at twenty years of age and the females at twenty-five, if before they have not entered the matrimonial state, and in both the obligation ceases at the age of sixty. The chiefs of clans, or cabezas de barangay and their eldest sons, or in default of children, the person adopted in their stead, that is, an entire tribute and a half, are exempt from this tax, as a remuneration for the trouble and responsibility they may have in collecting in the forty or fifty tributes, of which their respective clans are composed. Besides these there are various other classes of exempted persons, such as the soldiers who have served a certain number of years, those who have distinguished themselves in any particular manner in the improvement of industry or agriculture, and others who have received special certificates, on just and equitable grounds. In summing up the total number of exempted persons, on an average in the whole of the provinces, they will be found in the proportion of fifty to every thousand entire tributes.

The head-tax of the Sangleys has usually been attended with so many difficulties in its collection, owing to the facilities with which they absent or secrete themselves, and the many stratagems this cunning and artful race employ to elude the vigilance of the commissioners, that the government has at length found itself compelled to let out this branch, as was done in 1809, when it was disposed of in the name of one of them for the moderate sum of $\$ 30,000$; notwithstanding it is a generally received opinion, that the number of this description of Chinese, constantly residing in the Islands, is above 7,000 , which, at the rate of $\$ 6$ per head, would raise this proportion of the tax as high as $\$ 42,000$.

The Community funds belonging to each town, have, in conformity to the regulations under which they are administered, a special, or I might say, local application; but collected together into one stock, as is now the case, and directly administered by the government, they produce a more general utility. The head town of the province A, for example, requires to rebuild the public prison or town-hall, and its own private funds are not sufficient to defray the expenses of the work in question. In this case, therefore, the government gives orders for the other dependent towns to make up the deficiency by taking their proportions from their respective coffers, as all have an equal interest in the proposed object being carried into effect. The king's officers, in consequence thereof, draw the corresponding sums from these funds, the whole of which is under their immediate superintendence. And in order that the surplus of this stock may not stand still, but obtain every possible
increase in a country where the premium for money is excessive, when let out at a maritime risk, it is ordered that some part shall be appropriated in this way, and on the same terms as those observed by the administrators of the charity funds belonging to the Misericordia (Charity) establishment, and the third order of St. Francis, which is another of the great advantages of assembling this class of property.

In consequence of this judicious regulation, and the success with which this measure has hitherto been attended, the Community fund has gone on increasing in such a way that, notwithstanding the sums drawn from it for the purpose of constructing causeways, bridges, and other municipal objects, at the commencement of 1810 , the stock in hand amounted to no less than $\$ 200,000$; and it is natural to suppose when the outstanding premiums due shall have been paid in, a considerable augmentation will take place. This branch, although not exactly comprehended in those which constitute the revenue of the government, has so obvious an analogy with that of tributes, that I have not deemed it any essential deviation from the order and method I have hitherto observed in this work, to introduce it in this place, as in itself it did not deserve to be classed under a distinct head.

Notwithstanding the truth of what has been said with regard to the moderate rate of the tribute imposed on the native of the Philippine Islands, it would be extremely desirable if he could be altogether exonerated from a charge which he bears with great repugnance, by some other substitute being adopted, indirectly producing an equivalent compensation. In the first place, because the just motives of complaint would cease, caused not only by the tribute, but also the manner of its collection; and an end would then be put to those intrigues and extortions the district magistrates commit, under the title of zealous collectors of the king's revenue, and the power of a multitude of subaltern tyrants, comprehended under the denomination of chiefs of native clans (cabezas de barangay) would then also fall to the ground; a power which, if now employed for the purpose of oppressing and trampling on the liberties of inferiors, might some day or other be converted into an instrument dangerous and subversive of our preponderance in the country. In the second place, if, among all the civilized nations a head-tax (poll-tax) is in itself odious, it must incontestably be much more so among those whose unlettered state, far from allowing them to know that the social order requires a certain class of sacrifices for its better preservation, makes them attribute exactions of this kind to an abuse of

## Tribute

 burdensome.superiority. Hence are they led to consider these restraints as the symbols of their own slavery and degradation, as in fact the natives in these Islands have ample reasons for doing, when the legal exemption of the whites is considered, without any other apparent reason than the difference in color. Independent of this, the substitute above alluded to would be extremely expedient, inasmuch as it would greatly simplify the plan of administration, the accountant's department would be freed from the most painful part of its labors, and the district magistrates and sub-collectors would not so frequently be entangled in their accounts, and exposed to expensive and interminable lawsuits, as now so often happens.

The difficulty, however, of finding out this compensation or substitute is a matter of some consideration. On the one hand, if it was attempted to distribute the proceeds arising out of the tributes on other branches, such as tobacco, native wine, bonga, and custom house, it would, at first sight, appear possible, through the medium of an almost invisible augmentation in the respective sale prices and in the king's duties, that this important object might easily be attained; but, on the other, it might be apprehended that the additional value put on the articles above-mentioned, would produce in their consumption a diminution equal to the difference in prices, in which cases no advantage would be gained. The practicability of the operation, in my opinion, depends on the proportion in which the means of obtaining the articles in question respectively stand with the probability of their being consumed. I will explain myself. If, for example, the annual stock of tobacco laid in should be insufficient to meet the wants of the consumers, as constantly occurs, it is clear that this article, when monopolized, will bear a small augmentation of price, not only without any inconvenience or risk, but with the moral certainty of obtaining a positive increase of revenue, the necessary effect of the total consumption of the tobacco laid in and sold. But as this does not happen with the branch of native wines, of which the stock usually exceeds the demand, and as the bonga also is not susceptible of this improvement, owing to the small place it occupies among the other resources of the revenue, no other means are left than to add to the duties of export on silver, and of import on foreign merchandise, a percentage equivalent to the deficiency not laid on tobacco, unless it should be deemed more advisable to levy a sumptuary contribution on coaches, horses and servants, and especially on all kinds of edifices and houses built of stone and mortar, situated both within and without the capital.

However this may be, whatever the king loses in revenue by Objection to the abolition of the native tributes, no doubt, could be made up tribute-paying. by an appeal to other ways and means. It is well-known that many of the Indian tribes refuse to become subjects of the crown and object to enter into general society on account of the odious idea they have formed of paying tribute; or, as they understand it, the obligation of giving something for nothing, notwithstanding those who. voluntarily submit themselves to our laws, are exempt from tribute, and this charge falls only on their descendants. But of this they must either be ignorant, or they regret depriving their posterity of that independence in which they themselves have been brought up, and thus transmit to them slavery as an inheritance. As soon, therefore, as a general exemption of this kind, without distinction of casts, should be made public, the natives would quit their fastnesses and secluded places, and satisfied with the security offered to them, would be seen coming down to the plains in search of conveniences of civilized life, and all gradually would be reduced to Christianity. Hence the increase of productions and their consumption, as well as the extension of agriculture, industry and internal commerce. The diminution of smuggling tobacco would soon follow, progress would be made in the knowledge of the mines and natural riches of the country, and financially, greater facilities would present themselves in gradually carrying into effect its entire conquest and civilization.

Advantages of such great and extraordinary importance deserve to be seriously weighed, and to this valuable department of public administration the early attention of those in authority ought to be called. Let due inquiries be made, and soon shall we discover the substantial benefits which would be derived to the treasury from the adoption of this measure, as popular as it is just, and also conformable to the liberal spirit of the times. In support of the preceding arguments, it ought further to be observed, that when all the branches constituting the king's revenue are well organized, brought to their most productive state, and the public debt contracted under unforeseen exigencies paid off, as long as present circumstances do not vary, an annual surplus of revenue, equal to more than $\$ 500,000$, will be left; and as the proceeds of the particular branch of tributes do not amount to this sum, it is evident their abolition may take place, not only without any derangement or onerous consequences to the administration, but even without any deficiency being experienced, or any necessity to recur to the treasury of New Spain for extraordinary aid. These reasons acquire still
greater force when it is remembered that, as things now are, all the branches of public revenue are in a progressively improving condition, and as the whole are still susceptible of a much more productive organization, the annual surplus of receipts will rapidly become greater, and consequently also the necessity will diminish of continuing to burden this portion of His Majesty's dominions with contributions in order to meet the expenses of their defence and preservation.

Finally, well convinced of the advantageous results which, in every sense, would emanate from the revision and reforms proposed, I abstain from offering, in support of my arguments, a variety of other reflections which occur to me, not to be too diffuse on this subject; trusting that the hints I have already thrown out will be more than sufficient to excite an interest and promote a thorough and impartial investigation of concerns, highly important to the future welfare and security of this colony.

Besides the six preceding branches which constitute the chief mass of the public revenue in these islands, there are several smaller ones of less consideration and amount; some having a direct application to the general expenses of the local government, and the others, intended as remittances to Spain; a distinction of little import and scarcely deserving of notice, since the object of the present sketch is to convey information on a large scale respecting the King's revenue in these Islands. As some of them, however, yield proceeds more regular than the others, I have classed together the receipts of the Pope's Bulls, or "Bulas de Cruzada," playing-cards, tithes, stamps and gunpowder, under the head of Subaltern Branches, with regard to the rest, to the general statement already quoted.

In conformity to the returns with which I have been favored from the public offices, these five branches produced, in the year 1809, $\$ 45,090.75$ in the following proportions:

|  | Sales. | Expenses. | Net Proceeds. |
| :---: | :---: | :---: | :---: |
| Pope's bulls. | \$15,360.75 | \$4,422.25 | \$10,938.50 |
| Playing cards | 11,539.125 | 932.625 | 10,606.50 |
| Tithes. | 12,493.00 | - | 12,493.00 |
| Stamps. | 4,467.50 | 321.50 | 4,146.00 |
| Gunpowder. | 7,307.625 | 401.125 | 6,906.375 |
|  | \$51,168.125 | \$6,077.75 | \$45,090.375 |

The scanty proceeds of the tithes will naturally appear remarkable; but it ought to be remembered that, besides the ordinary tribute, the natives pay half a real under this denomination, without any distinction of person, or any reference whatever to their respective means, the total amount of which is already added to the tributes, and for this reason not repeated in this place. In addition also no tithes are levied, except on lands belonging to Spaniards, churches, regular clergy, ecclesiastical corporations, etc., and even then the articles of rice, wheat, pulse indigo and sugar, are alone liable. The above branches are all in charge of administrators, and from this plan it certainly would be advisable to separate the tithes and farm them out at public auction, as was proposed by the king's officers of the treasury, in their report on this, as well as other points, concerning the revenue, and dated October 24, 1792. From the net proceeds of the gunpowder the expenses of its manufacture, confided to the commandant of artillery, ought seemingly to be deducted; but, as they cannot be ascertained with any degree of certainty, and as besides they are comprehended in the general expenses of that department, a separate deduction may be dispensed with.

In order to form a correct idea of the annual amount of the expenditure incurred by the administration and defence of the Philippine Islands, it is not necessary in this place to distinguish each item, separately; or to enumerate them with their respective sums or particular denominations. Some general observations on this subject ought, nevertheless, to be made, with a view to point out the reforms of which this important department of the public revenue is susceptible.

In the part relating to the interior administration or government, ample room is certainly left for that kind of economy arising out of the adoption of a general system, little complicated; but it is besides indispensably necessary that, at the same time the work is simplined and useless hands dismissed, the salaries of those who remain should be proportionally increased, in order to stimulate them in the due performance of their duties. It might also be found advisable to create a small number of officers of a superior order, who would be enabled to co-operate in the collection of the king's revenue, and the encouragement of agriculture, commerce and navigation, in their respective departments. The additional charges in this reapect cannot be of any great consequence; although, in reality,

Disbursements and general expenses.
by the receipts increasing through the impulse of an administrative order more perfect, and the expenses being always the same, the main object, so anxiously sought for in another way, would be thus attained.

The reverse, however, happens with regard to the expenses of defence, as I have called them, the better to distinguish them from those purely relating to the interior police or administration. Every sacrifice, most assuredly, ought to appear small, when the object is to preserve a country from falling into the hands of an enemy, and it ought not to excite surprise, if, during the course of the last fifteen years, several millions of dollars have been expended in the Philippines, in order to shield them from so dreadful a misfortune. But the late memorable revolution in the Peninsula has given rise to so great a change in our political relations, and it is extremely improbable that these Islands will be again exposed to the same danger and alarm, that the government may now, without any apparent risk, dispense with a considerable part of the preparations of defence, at one time deemed indispensably necessary. A colony that has no other strong place to garrison than its capital, and on the loyalty of whose inhabitants there are sufficient motives to rely, ought, in my opinion, to be considered as adequately provided against all ordinary occurrences in time of peace, with the 4,000 regulars, more or less, of all arms, the usual military establishment. In case any suspicions should arise of an early rupture with the only power whose forces can inspire the governors of these Islands with any kind of apprehensions, means will not be wanting to an active and provident minister, of giving proper advice, so as to allow sufficient time for the assembling of the battalions of provincial militia and all the other necessary preparations of defence, before the enemy is in an attitude to effect an invasion of a country so far distant from his own possessions on the coasts of Malabar and Coromandel. Consequently, by disbanding the corps of provincial infantry, cavalry and artillery, which continue uselessly to be kept on foot, an annual saving of from $\$ 220,000$ to $\$ 250,000$ would take place, an amount too great to be expended unless imperiously called for by the evident dread of a premeditated attack from an hostile quarter.

The navy is another of the departments in which reforms may be introduced, of no small moment to the treasury. Of course by the government merely dispensing with the policy of keeping in readiness two large ships to convey to Acapulco the cargos, for which the Manila merchants enjoy an annual licence, and leaving to the latter the full liberty of following up their speculations on their own
account and risk, in vessels of their own, individually or with joint stock, a saving would result in favor of the crown equal to $\$ 140,000$ to $\$ 150,000$ per annum, and without preventing the receipt in Acapulco of the customary duties of $\$ 160,000$ or $\$ 166,000$ corresponding to the said licenses. This will evidently be the case, because as long as the large disposal of funds of the charitable institutions are employed in maritime risks, and the private property of others is besides added to them, the amount of the operations undertaken by the merchants of the Philippines to New Spain, when divested of all restraint, will always exceed $\$ 500,000$ per annum. Nor is there now any further occasion for the government to continue granting this species of gratuitous tutelage to a body of men possessed of ample means to manage their own affairs, and who demand the same degree of freedom, and only seek a protection similar to that enjoyed by their fellow-countrymen in other parts of the king's dominions.

In case the above reform should be adopted, it might be deemed requisite for the government to undertake the payment of some of the charges under the existing order of things, defrayed out of the freights to which the merchandise shipped in the Acapulco traders is liable; because, calculating the freight at the usual rate of $\$ 200$ for each three bales, or the amount of one ticket, out of the one thousand constituting the entire cargo, and of which one-half, or $\$ 100,000$ more or less, is appropriated to the ecclesiastical chapter, municipality, officers of the regular army (excluding captains and the other higher ranks) and the widows of Spaniards, who in this case would be losers, independent of the remaining $\$ 100,000$ or 500 tickets distributed among the 200 persons having a right to ship to Acapulco, it would, at first sight, appear reasonable for the treasury to indemnify the above description of persons by a compensation equivalent to the privation they experience through the new arrangement of the government. But as the practice of abuses constitutes no law, and what is given through favor is different to that which is required by justice, there are no reasons whatever why the treasury should be bound to support the widows of private persons, from the mere circumstance of their deceased husbands having been Spaniards; more particularly if it is considered that, far from having acquired any special merit during their lifetime, most of them voluntarily left their native country for the purpose of increasing their fortunes, and others were banished from it, owing to their bad conduct. Neither can it be said that the municipality have a legal right, in the case before stated, to receive any equivalent for the value of their respective annual tickets, which, when disposed of, usually amount
to about $\$ 20,000$ in the first place, because it is well-known that the eleven aldermen's seats, of which that body is composed, seats which can either be sold or resigned, originally did not cost as much as $\$ 50,000$ and clearly the principal invested is out of all kind of proportion with the enormous premium or income claimed. In the second place, although the above municipal situations were originally purchased with a view to obtain some advantages, these formerly were very different to what they are at present, when the great increase of shippers to Acapulco, or in more plain terms, of purchase of tickets competing to obtain them, has given to these permits a value more than triple to that they possessed thirty years ago.

Indemnifying the aldermen.

The navy.
In order, therefore, to do away with all motives of doubt and dispute, as well as for many other reasons of public utility, the best plan, in my opinion, would b :, to return to each alderman his money, and the present municipal constitution being dissolved, the number of members might be reduced to four, with their corresponding registrar, and like the two ordinary "alcaldes," elected every year without any other reward than the honor of presiding over and representing their fellow-citizens. Under this supposition, the only classes entitled to compensation, strictly speaking, would be the ecclesiastical chapter and the subaltern officers, whose respective pay and appointment are not in fact sufficient for the decency and expenses of their rank in society. Of course it would then be necessary to grant them more adequate allowances, but, according to reasonable calculations, the sum total annually required would not exceed $\$ 30,000$; consequently, the reform projected with regard to the Acapulco ships would still eventually produce to the treasury a saving of from $\$ 60,000$ to $\$ 70,000$ in the first year of its adoption, and of $\$ 110,000$ to $\$ 120,000$ in every succeeding one.

It is, on the other hand, undeniable that, if the royal navy and cruising vessels, or those belonging to the Islands and under the immediate orders of the captain-general, were united into one department, and placed under one head, considerable economy would ensue, and all motives of discord and emulation be moreover removed. Such would be the case if the change was attended with no other cirumstances than the consequent diminution of commanders, subaltern officers, and clerks; but it would be also proper to unite the arsenals, and adopt a more general uniformity in the operations and dependences of this part of the public services. It is equally certain that, during peaceful times, the two schooners and sixty gunboats, constituting the number of the above-mentioned cruising
vessels, would be in great measure useless; whilst in case of a rupture, they are not sufficient to protect the trade of these Islands from the attacks of an enemy, notwithstanding they now cost the government considerable sums in repairs, etc., in order to keep them fit for service. The government ought therefore to guard against this waste of public money, without, however, neglecting the defence of the Islands, objects which, in my opinion, might easily be reconciled. Intelligent persons have judged that by reducing the naval forces to two frigates, two schooners, and about a dozen gunboats, the essential wants of the colony would be duly answered, in ordinary times; and some of the vessels might then be destined to pursue hydrographical labors in the Archipelago, which, unfortunately, are in a most backward state, whilst others could be sent on their periodical cruises against the Moros. By this means, at least, the navy department would be greatly simplified, and cease to be eternally burdensome to the government. With regard to the superfluous gunboats, it would be expedient to distribute them gratuitously among the marine provinces and Bisayan Islands, on the only condition of their being always kept fit for service; as, in one sense, the great expenses of maintaining them would be thus saved by the treasury, and, another, the inhabitants of those portions of the coast would be in possession of means sufficiently powerful to repel the aggressions of the Moros, who commit great ravages on their settlements. Finally, if besides the reforms of which the army and navy are susceptible, it is considered that the public works, such as prisons, schools, bridges, and causeways, so expensive in other countries, in the Philippines are constructed by the natives on the most reasonable terms, out of the community funds; that there is no necessity to build fortifications, and maintain numerous garrisons; that the clergy, to whose zeal and powerful influence the preservation of these Islands is chiefly due, do not cost the treasury annually above $\$ 200,000$ and that the geographical situation of the colony in great measure shields it from the attacks of external enemies, it will readily be confessed, that a wise and firm government might undertake, without the dread of having to encounter any great obstacles, an administrative system, in a general point of view, infinitely more economical than the one hitherto followed; might be able to extirpate numerous abuses, and by calling forth the resources of the country gradually raise it to a flourishing condition, and cause it hereafter to contribute largely to the other wants of the crown. Hence was it that the distinguished voyager, La Pérouse (Chap. 15), contemplating these Islands with a political eye, did not hesitate to affirm

Objectionable office-holders.
"that a powerful nation, possessed of no other colonies than the Philippines, that should succeed in establishing there a form of government best adapted to their advantageous circumstances, would justly disregard all the other European establishments in Africa and America."

In our colonies, appointments and command, far from being sought as a means to obtain a good reputation, or as affording opportunities of contributing to public prosperity, are, it is too well known, only solicited with a view to amass wealth, and then retire for the purpose of enjoying it. Commercial pursuits being besides attended with so many advantages that those only decline following them who are divested of money and friends; whilst the situation in the revenue are so few in number, compared with the many candidates who solicit them, that they are consequently well appointed, it follows that the excess left without occupation, besides being considerable, is generally composed of needy persons, and not the most suitable to exercise the delicate functions of collectors and magistrates in the provinces. From this class nevertheless the host of officers are usually taken who, under the name of collectors, surveyors and assessors of tributes, intervene in, or influence the public administration. Owing to the variety and great number of persons emigrating to America, ample field, no doubt, is there left for selection, by which means the viceroys may frequently meet with persons suitable and adequate to the above trusts, if prudent steps are only taken; but in this respect the case is very different in the Philippines, where chance alone occasionally brings over a European Spaniard, unemployed or friendless. In these remote Islands, also, more than in any other quarter, people seek lo live in idleness, and, as much as possible, without working, or much trouble. As long as hopes are entertained of doing something in the Acapulco speculations, every other pursuit is viewed with indifference, and the office of district or provincial magistrate is only solicited when all other resources have failed, or as a remedy against want. As the applicants for these situations are therefore not among the most select classes, it very frequently happens that they fall into extremely improper and unworthy hands.

It is in fact common enough to see a hairdresser or a lackey converted irito a governor; a sailor or a deserter transformed into a district magistrate, collector, or military commander of a populous province, without any other counsellor than his own crude understanding, or any other guide than his passion. Such a metamorphosis would excite laughter in a comedy or farce; but, realized
in the theatre of human life, it must give rise to sensations of a very different nature. Who is there that does not feel horror-struck, and tremble for the innocent, when he sees a being of this kind transferred from the yard-arm to the seat of justice, deciding, in the first instance, on the honor, lives, and property of a hundred thousand persons, and haughtily exacting the homage andincense of the spiritual ministers of the towns under his jurisdiction, as well as of the parish curates, respectable for their acquirements and benevolence, and who, in their own native places, would possibly have rejected as a servant the very man whom in the Philippines they are compelled to court and obey as a sovereign.

In vain do the laws ordain that such offices shall not be given away to attendants on governors and members of the high court of justice, for under pretext of the scarcity of Europeans experienced in the colony, means are found to elude the statute, by converting this plea into an exception in favor of this description of persons. By such important offices being filled in this manner, it is easy to conceive the various hardships to which many of the provinces and districts are exposed; nor can any amelioration be expected as long as this plan is persisted in and the excesses of the parties go without punishment.

Independent, however, of the serious injuries and great errors persons of the class above described cannot fail to commit in the exercise of their functions, purely judicial, the consequences of their

Evils from officials in trade.
aid of his subjects, and if he deigns to remunerate their labor, at most it is only on the same terms as if they had been woi-sing on account of the king. These unhappy people bring in their produce and crude manufactures to the very person who, directly or indirectly, is to fix upon them an arbitrary value. To offer such and such a price for the articles is the same as to say, another bidding shall not be made. To insinuate is to command-the native is not allowed to hesitate, he must either please the magistrate, or submit to his persecutions. Being besides free from all competition in the prosecution of his traffic, since he is frequently the only Spaniard resident in the province, the magistrate therein acts with unbounded sway, without dread, and almost without risk of his tyranny ever being denounced to the superior tribunals.

Speculating in tributes.

In order, however, that a more correct idea may be formed of the iniquitous conduct of many of these public functionaries, it is necessary to lay open some part of their irregular dealings in the collection of the Indian tributes. It is well known that the government, anxious to conciliate the interests of the tributary classes with those of the revenue, frequently commutes the pecuniary capitation tax into an obligation to pay the amount in produce or manufactures. A season comes when, owing to the failure of the crops, the productions have risen to an excessive price, and consequently infinitely above the ordinary rates affixed by law, which are generally the lowest, and the natives, unable to keep their bargains without considerable injury or endangering the subsistence of their numerous families, implore the favor of the magistrate, petitioning him to lay their calamitous situation before the superior government, in order to have the payment of their tribute in kind remitted, and offering to pay it in money. This is the precise moment when, as his own profits depend on the misery of the province under his command, he endeavors to misuse the accidental power with which he is invested. Hence it happens that, instead of acting as a beneficent mediator, and supporting the just solicitations of the natives, he at first disregards their petition, and then all at once transforming himself into a zealous collector, issues his notifications, sends his satellites into the very fields to seize on the produce, and in a most inexorable manner insists on collecting till necessity compels him to suspend the measure. The principal object being attained, that is, having now become master of the gleanings and scanty crops of his bereft subjects, on a sudden his disposition changes, he is moved to pity, and in the most pathetic language describes to the government the ravages done to the plantations by the hurricanes, and the
utter impossibility of collecting in the tributes that year in kind. On such a remonstrance he easily obtains permission to change the standing order, and proceeding on to collect in some of the remaining tributes in money, merely to save appearance, with perfect impunity he puts the finishing stroke to the wicked act he had commenced, by applying to himself all the produce his collectors had gathered in, and places to the credit of the treasury the total amount of the tributes, corresponding to his jurisdiction, in money.

Supposing, for example, that this has happened in the province of Antique, where the payment of the capitation-tax generally takes place in the unhusked rice, rated at two reals per cavan, and, through the effects of a bad season, this article should rise as high as ten or twelve reals. It is clear that the magistrate, by accounting for the tributes with the revenue office in money, and collecting them in kind at the rate fixed by law, would by the sales gain a profit of 400 or 500 per cent; at the same time the native, by the mere circumstance of then paying in kind, would have paid the tribute corresponding to five or six years in a single one, without, on that account, having freed himself from the same charge in the following seasons.

When the extortionate acts as these are practised, to what lengths may it not be expected the other excesses and abuses of authority

No check on extortion.
by the timely and energetic interposition of the protector of the natives; for although this office is in itself highly respectable, it cannot in any way reach the multitude of excesses committed, and much less prevent them; not only because the minister who exercises it resides in the city, where complaints are seldom brought in, unless they come through the channel of the parish curates; but also on account of the difficulty of fully establishing the charges against the magistrates, in the way the natives are at present depressed by fear and threats, as well as restrained by the sub-governors and other inferior officers of justice, who, being dependent upon, and holding their situations from the magistrates, are interested in their monopolies and extortionate acts being kept from public view.

Less
complaisant laws needed.

If, therefore, it is not possible entirely to eradicate the vices under which the interior administration of these Islands labers, owing to the difficulty of finding persons possessed of the necessary virtues and talents to govern, in an upright and judicious manner, let us at least prevent the evils out of the too great condescension of our own laws. In the infancy of colonies, it has been the maxim of all governments to encourage the emigration and settlement of inhabitants from the mother-country, without paying much attention to the means by which this was to be done. It was not to be wondered at that, for reasons of state, defects were overlooked,-at such periods were even deemed necessary. Hence the relaxation in the laws in favor of those who, quitting their native land, carried over with them to strange countries their property and acquirements. Hence, no doubt, also are derived the full powers granted to those who took in charge the subjection and administration of the new provinces, in order that they might govern, and at the same time carry on their traffic with the natives, notwithstanding the manifest incompatibility of the two occupations; or rather, the certainty that ought to have been foreseen that public duties would generally be postponed, when placed in competition with private interests and the anxious desire of acquiring wealth.

Subsequently that happened which was, in fact, to be dreaded, viz., what at first was tolerated as a necessary evil, sanctioned by the lapse of time has at length become a legitimate right, or rather a compensation for the supposed trouble attached to the fulfillment of the duties of civil magistrates; whilst they, as already observed, think of nothing but themselves, and undergo no other trouble or inconvenience than usually fall on the lot of any other private merchant. In the Philippines, at least, many years having elapsed since the natives peaceably submitted to the dominion of the king, every
motive has ceased that could formerly, and in a certain degree, justify the indulgence so much abused, at the same time that no plausible pretext whatever exists for its further continuation.

Although hitherto the number of whites, compared to that of the people of color, has not been great, as the whole of the provincial magistracies, collectorships, and subaltern governments, do not exceed twenty-seven, the scarcity of Spaniards ought not to be alleged as a sufficient reason; nor can it be doubted these situations might at any time be properly filled, if the person on whom the choice should fall were only certain of living with decency and in a suitable manner, without being carried away with the flattering hopes of withdrawing from office, with ten, twenty, and even as high as fifty thousand dollars of property, as has heretofore been the case, but satisfied with a due and equivalent salary they might receive as a reward for the public services they perform.

I do not therefore see why the government should hesitate in resolving to put a stop to evils which the people of the Philippines have not ceased to deplore from the time of the conquest, by proscribing, under the most severe penalties, the power of trading, as now exercised by the provincial magistrates. The time is come when this struggle between duty and sordid interest ought to end, and reason, as well as enlightened policy, demand that in this respect our legislation should be reformed, in order that the mace of justice, instead of being prostituted in search of lucre, may henceforwards be wholly employed in the support of equity and the protection of society.

The only objection which, at first sight, might be started against the suggestions here thrown out is the increased expense which would

Urgence of reform. fall on the treasury, owing to the necessity of appropriating competent salaries for the interior magistrates under the new order of things. Independent, however, of the fact that the rapid improvements the provinces must assume, in every point of view, would superabundantly make up this trifling difference; yet supposing the sacrifice were gratuitous, and even of some moment, it ought not, on that account, to be omitted, since there is no public object more important to the sovereign himself, than to make the necessary provision for the decorum of the magistracy, the due administration of justice, and the maintenance of good order among his subjects.

The position being established, that a number of whites more than sufficient might be obtained, eligible and fit to perform the duties of civil magistrates, which they would be induced to under-
take, if adequate terms were only proposed, it would seem that no ill consequences might be expected from at once assimilating the regulations of these provincial judicatures to those of the corregimientos, or mayoralties of to wns in Spain, or in making out an express statute, on a triple scale, for three classes of magistrates, granting to them emoluments equivalen $t$ to the greater or lesser extent of the respective jurisdictions. As far as regards the pay, it ought to be so arranged as to act as a sufficient stimulus to induce European colonists to embrace this career, in a fixed and permanent way, which hitherto they have only resorted to as a five years' speculation. Conformably to this suggestion, and owing to the lesser value attached to money in India, compared with Europe, on account of the greater abundance of the necessaries of life, I am of opinion that it would be expedient to affix an annual allowance of $\$ 2,000$ to each of the appointments of the six principal and most populous provinces, $\$ 1,500$ for the next in importance, and for the twelve or thirteen remaining, at the rate of $\$ 1,000$ each; leaving to the candidates the option of rising according to their length of services and good conduct, from the lowest to the highest, as is the case in Spain.

The first part of the plan above pointed out embracestwoobjects. The one is to prevent the provincial magistrates from carrying on traffic, thus depriving them of every pretext to defraud the natives of what is their own; and the other, to form, in the course of a few years a class of men hitherto unknown in the Philippine Islands, who, taught by practice, may be enabled to govern the provinces in a more correct and regular manner, and acquire more extended knowledge, especially in the judicial proceedings of the first instance, which, owing to this defect, frequently compel the litigants to incur useless expenses, and greatly embarrass the ordinary course of justice. Although the second part at first seems to involve an increased expense of $\$ 36,000$ or $\$ 37,000$ annually, when well considered, this sum will be found not to exceed $\$ 20,000$, because it will be necessary to deduct from the above estimate the amount of three per cent. under the existing regulations allowed to the magistrates for the collection of the native tributes, in their character of subdelegates, generally amounting to $\$ 16,000$ or $\$ 17,000$; besides only taking into account such real and effective disbursements or extraordinary expenses as in fact they may legally have incurred in the performance of their duties.

Should it, however, be deemed expedient, from causes just in their nature, hereafter to exonerate the natives from the obligations of paying tributes, by which means the amount deducted for the three
per cent. commission could not then be brought into account, let me be allowed to ask what enlightened government would hesitate submitting to an additional expense of so trifling an import, in exchange for beholding more than two millions of men forever freed from the extortionate acts of their old magistrates; and, through the effects of the new regulations, the latter converted into real fathers of the people over whom they are placed? How different would then be the aspect these fine provinces would present to the eyes of the philosophical observer who would, in that case, be able to calculate to what an extent the progress of agriculture and industry in these islands might be carried.

Nevertheless, I do not wish to insinuate that by the better organization of the provincial governments, the present irregularities and abuses of authority would entirely cease; because I am aware,

Demoralization of over-seas service. more especially in the Indies, that the persons who hold public situations usually have too exaggerated ideas of their own personal importance, and easily mistake the gratification of their own whims for firmness of character, in the necessity of causing themselves to be respected. Still it is an incontestable fact that, by removing the chief temptation, and rescinding altogether the license to trade, the just complaints preferred by the native against the Spaniard would cease; the motives of those continual disputes which arise between the magistrates and the ministers of the gospel exercising their functions in the same provinces, and the zealous defenders of the rights of their parishioners, would be removed, and the inhabitants of Manila, extending their mercantile operations to the interior, without the dread of seeing them obstructed through the powerful competition of the magistrates in authority there, would be induced to settle in or connect themselves with the provinces, and thus diffuse their knowledge, activity and money among the inhabitants, the true means of encouraging the whole.

What has already been said will suffice to convince the lover of truth and the friend of general prosperity, how urgent it is to introduce as early as possible, the reform proposed into the interior administration of this important, although neglected colony; and it is to be hoped that the government, guided by these same sentiments, will not be led away by those narrow-minded people, who predict danger from every thing that is new; but, after due and mature deliberation, resolve to adopt a measure dictated by reason, and at the same time conformable to the best interests of the state.

Pioneer Philippine government a theocracy.

Standing of parish priests.

Of little avail would have been the valor and constancy with which Legaspi and his worthy companions overcame the natives of these islands, if the apostolic zeal of the missionaries had not seconded their exertions, and aided to consolidate the enterprise. The latter were the real conquerors; they who, without any other arms than their virtues, won over the good will of the islanders, caused the Spanish name to be beloved, and gave to the king, as it were by a miracle, two millions more of submissive and Christian subjects. These were the legislators of the barbarous hordes who inhabited the islands of this immense Archipelago, realizing, by their mild persuasion, the allegorical prodigies of Amphion and Orpheus.

As the means the missionaries called in to their aid, in order to reduce and civilize the Indians, were preaching and other spiritual labors, and, although scattered about and acting separately, they were still subject to the authority of their prelates, who, like so many chiefs, directed the grand work of conversion, the government primitively established in these colonies must necessarily have partaken greatly of the theocratical order, and beyond doubt it continued to be so, till, by the lapse of time, the number of colonists increased, as well as the effective strength of the royal authority, so as to render the governing system uniform with that established in the other ultramarine dominions of Spain.

This is also deduced from the fragments still remaining of the frst constitution, or mode of government introduced in the Batanes Islands and missions of Cagayan, administered by the Dominican friars in a spiritual and temporal manner; as well as from what may frequently be observed in the other provinces, by any one who bestows the smallest attention. Although the civil magistracies have since been regulated, and their respective attributes determined with due precision, it has not hitherto been possible, notwithstanding the pains taken to make the contrary appear, to do without the personal authority and influence the parish curates possess over their flocks. The government has, in fact, constantly been obliged to avail themselves of this aid, as the most powerful instrument to insure respect and a due subordination, in such manner that, although the parish curates are not at present equally authorized to interfere in the civil administration, in point of fact, they are themselves the real administrators.

It happens that, as the parish curate is the consoler of the afflicted, the peacemaker of families, the promoter of useful ideas, the preacher and example of every thing good; as in him liberality is seen to shine, and the Indians behold him alone in the midst of
them, without relatives, without traffic, and always busied in their care and improvement, they become accustomed to live satisfied and contented under his paternal direction, and deliver up to him the whole of their confidence. In this way rendered the master of their wishes, nothing is done without the advice, or rather consent, of the curate. The subaltern governor, on receiving an order from the superior magistrate, before he takes any step, goes to the minister to obtain his sanction, and it is he in fact who tacitly gives the mandate for execution, or prevents its being carried into effect. As the father of his flock, he arranges, or directs, the lawsuits of his parishioners; it is he who draws out their writings; goes to the capital to plead for the Indians; opposes his prayers, and sometimes his threats, to the violent acts of the provincial magistrates, and arranges every thing in the most fit and quiet manner. In a word, it is not possible for any human institution to be more simple, and at the same time more firmly established, or from which so many advantages might be derived in favor of the state, as the one so justly admired in the spiritual ministry of these islands. It may therefore be considered a strange fatality, when the secret and true art of governing a colony, so different from any other as is that of the Philippines, consists in the wise use of so powerful an instrument as the one just described, that the superior government, within the last few years, should have been so much deluded as to seek the destruction of a work which, on the contrary, it is, above all others, advisable to sustain.

In this, as well as many other cases, we see how difficult, or rather how absurd it is, to expect to organize a system of government, indistinctly adapted to the genius and disposition of all nations, however great the discordance prevailing in their physical and moral constitutions. Hence it follows that, by wishing to assimilate the administrative plan of these provinces to the one adopted in the sections of America, inconveniences are unceasingly met with, evidently arising out of this erroneous principle. Whatever may be asserted to the contrary, there is no medium. It is necessary to insure obedience either through dread and force, or respect must be excited by means of love and confidence. In order to be convinced that the first is not practicable, it will only be necessary to weigh well the following circumstances and reflections.

The number of the whites compared to that of the natives is so small, that it can scarcely be estimated in the proportion of 15 to 25,000 . These provinces, infinitely more populous than those of America, are entirely delivered up to the charge of provincial

Friars only check on officials.

Missionaries' achievements.
magistrates, who carry with them to the seats of their respective governments, no other troops than the title of military commandants, and their royal commission on parchment. Besides the friars, it sometimes happens that no other white person is to be found in an entire province, but the presiding magistrate. It is the duty of the latter to collect in the king's revenue; to pursue robbers; appease tumults; raise men for the regiments in garrison at Manila and Cavite; regulate and head his people in case of an external invasion, and, in short, it is he who is to do everything in the character of magistrate and in the name of the king. Considering, therefore, the effective power required for the due performance of so great a variety of duties, and the want of that species of support experienced by him who is charged with them, can it be denied that it would be risking the security of these dominions too much, to attempt forcibly to control them with means so insufficient? If the inhabitants become tumultuous and rise up, on whom will the magistrate call for aid to repress and punish them? In such a predicament, is any other alternative left him than to fly or die in the struggle? If among civilized nations, it is deemed indispensable that authority should always appear accompanied with force, how can it be expected, among Indians, that the laws will otherwise be respected, when left naked and unsupported?

Evidently, it is necessary to appeal to aid of another kind, and to employ means, which, although indirect ones, are, beyond all dispute, the best adapted to the peculiar circumstances of the coun-try,-means which, by influencing the mind, excite veneration, subdue the rude understanding of the inhabitants, and incline them to bear our dominion without repugnance. It is well understood what these means are, how much they are at hand, and how greatly also they have always been envied by other European nations, who have sought to extend and consolidate their conquests in both the Indies. Let us listen to La Pérouse, if we wish to know and admire the army with which our missionaries subdued the natives of both Californias; let us read, dispassionately, the wonderful deeds of the Jesuits in other parts of America, and, above all, let us visit the Philippine Islands and, with astonishment, shall we there behold extended ranges, studded with temples and spacious convents; the Divine worship celebrated with pomp and splendor; regularity in the streets, and even luxury in the houses and dress; schools of the first rudiments in all the towns, and the inhabitants well versed in the art of writing. We shall there see causeways raised, bridges of a good architecture built, and, in short, all the measure of good
government and police, in the greatest part of the country, carried into effect, yet the whole is due to the exertions, apostolic labors and pure patriotism of the ministers of religion. Let us travel over the provinces, and we shall there see towns of $5000,10,000$, and 20,000 Indians, peacefully governed by one weak old man, who, with his doors open at all hours, sleeps quiet and secure in his dwelling, without any other magic, or any other guards, than the love and respect with which he has known to inspire his flock. And, when this is contemplated, can it be deemed possible, through foolish jealousy and vain wish for those persons only pointed out by the general laws in ordinary cases, to intervene in the government of the natives, that the fruit of so much time constancy are not to be lost, but also by hereafter disregarding and rejecting a co-operation, as efficient as it is economical, that attempts should purposely be made to destroy the mainspring of the whole of this political machine?

Such, nevertheless, are the mistaken ideas which, within the last few years, have unhappily led to the adoption of measures, diametrically opposed to the public interest, under the pretext of curtail-

Curtailing priestly authority.
it is declared, as a standing rule, that no Indian, who may lately have been employed in the domestic service of the curate, shall in his own town be considered eligible to any office belonging to the judicial department.

On measures of this kind, comments are unnecessary; their meaning and effect cannot be mistaken. I shall, therefore, merely observe, that no untimely means could have been devised more injurious to the state, to the propagation of religion, and even to the natives themselves. It is, in fact, a most strange affair, that such endeavors should have been made to impeach the purity, by at the same time degrading the respectable character of the parishcurates, more particularly at a period when, owing to partality and the scarcity of religious men, it would have seemed more natural to uphold, and by new inducements encourage the zeal and authority of the remaining few. This step appears the more singular, I repeat, at a moment when, neither by suspending the sending out of missionaries to China, and the almost entire abandonment of the spiritual conquest of the Igorots and other infidel tribes, inhabiting the interior of these islands, have the above Spanish laborers been able to carry on the ordinary administration, nor prevent entire provinces from being transferred, as is now the case, into the hands of Indians and mestizo clergymen of the Sangley race, who, through their great ignorance, corrupt morals, and total want of decorum, universally incur the contempt of the flocks committed to their care, and, in consequence of their tyrannical conduct, cause the people to sigh for the mild yoke of their ancient pastors.

Friars bulwark of Spanish rule.

If, therefore, it is the wish of the government to retain the subjection of this colony, and raise it to the high degree of prosperity of which it is susceptible, the first thing, in my opinion, that ought to be attended to is the good organization of its spiritual administration. On this subject we must not deceive ourselves. I again repeat, that as long as the local government, in consequence of the want of military forces, and owing to the scarcity of Europeans, does not in itself possess the means of insuring obedience, no other alternative remains. It is necessary to call in to its aid the powerful influence of religion, and to obtain from the Peninsula fresh supplies of missionaries. As in their nature the latter are essentially different from the other public functionaries, it is well known they neither seek nor aspire to any remuneration for their labors, their only hope being to obtain, in the opinion of the community at large, that degree of respect to which they justly consider themselves entitled. Let, therefore, their pre-eminences be retained to them;
let them be treated with decorum; the care and direction of the Indians confided to their charge, and they always be found united in support of justice and the legitimate authority.

Nothing is more unjust, and of nothing have the spiritual directors of the provinces so much reason to complain, than the little discernment with which they have sometimes been judged and condemned, by causing the misconduct of some of their individual members to affect the whole body. Hence is it that no one can read without shame and indignation, the insidious suggestions and allusions, derogatory to their character, contained in the Regulations of Government framed at Manila in the year 1768, and which although modified by orders of the king, are at the present moment still in force, owing to the want of others, and found in a printed form in the hands of every one. Granting that in some particular instances, real causes of complaint might have existed, yet in the end, what does it matter if here and there a religious character has abused the confidence reposed in him, as long as the spirit by which the generality of them are actuated, corresponds to the sanctity of their state, and is besides conformable to the views of government? Why should we be eternally running after an ideal of perfection which can never be met with? Nor, indeed, is this necessary in the present construction of society.

If, however, any weight is to be attached to imposture with which, from personal motives, attempts have been made to obscure the truth, and prejudice the public mind against the regular clergy; or, if the just defense on which I have entered, should be attributed to partiality or visionary impressions, let the Archives of the Colonial Department be opened, and we shall there find the report drawn up by order of the king on November 26, 1804, by the governor of the Philippine Islands, Don Rafael Maria de Aguilar, with a view to convey information regarding the enquiries at that time instituted respecting the reduction of the inhabitants of the Island of Mindoro; a report extremely honorable to the regular clergy, and dictated by the experience that general had acquired during a period of more than twelve years he had governed. Therein also will be seen the answer to the consultation addressed to his successor in the command, Don Mariano Fernandez de Folgueras, under date of April 25, 1809, in which he most earnestly beseeches the king to endeavor, by every possible means, to send out religious missionaries; deploring the decline and want of order he had observed with his own eyes in the towns administered by native clergymen, and pointing out the urgent necessity of intrusting the spiritual

## Unwise to

 discredit priests.Testimony in their behalf.
government of these provinces to the dexterous management of the former. Testimonies of such weight are more than sufficient at once to refute the calumnies and contrary opinions put forth on this subject, and at the same time serve as irrefragable proofs of the scrupulous impartiality with which I have endeavored to discuss so delicate a matter.

In a general point of view, I have alluded to the erroneous system, which during the last few years has been pursued by the government with regard to the parish-curates employed in the interior, and also sufficiently pointed out the advantages reasonably to be expected if the government, acting on a different policy, or rather guided by other motives of state, instead of following the literal text of our Indian legislation, should come to the firm determination of indirectly divesting themselves of a small portion of their authority in favor of the religious laborers who are acting on the spot. Having said thus much, I shall proceed to such further details as are more immediately connected with the present chapter.

The ecclesiastical jurisdiction is exercised by the metropolitan archbishop of Manila, aided by the three suffragans of Nueva Segovia, Nueva Caceres and Cebu.

The archbishopric of Manila comprehends the provinces of Tondo, Bulacan, Pampanga, Bataan, Cavite, Laguna de Bay, Zambales, Batangas, and the Island of Mindoro.

The bishopric of Nueva Segovia comprehends the province of Pangasinan, the missions of Ituy and Paniqui, the provinces of Ilocos, Cagayan, and the missions of the Batanes Islands.

That of Nueva Caceres comprehends the provinces of Tayabas, Nueva Ecija, Camarines and Albay.

That of Cebu comprehends the Islands of Cebu and Bohol, Iloilo, Capiz and Antique, in the Island of Panay, the Islands of La Paragua, Negros and Samar, Misamis, Caraga and Zamboanga in that of Mindanao, and the Mariana Islands.

The archbishop has a salary of $\$ 5,000$ and the bishops $\$ 4,000$ each. The curacies exceed 500 , and although all of them originally were in charge of persons belonging to the religious orders, owing to the expulsion of the Jesuits and the excessive scarcity of regular clergy, so many native priests have gradually been introduced among them, that, at present, nearly half the towns are under their direction. The rest are administered by the religious orders of St. Augustine, St. Dominic and St. Francis, in the following manner:

|  | Towns |
| :---: | :---: |
| The Augustinians. | 88 |
| The barefooted Augustinians (Recoletos). | 52 |
| The Dominicans. | 57 |
| The Franciscans. | 96 |
| Total... | 293 |

It ought, however, to be observed, that since the detailed statement was made out, from which the above extract has been taken, so many members of the religious orders have died, that it has been necessary to replace them in many towns with native clergymen, as a temporary expedient, and till new missionaries shall arrive from Spain.

The monastic curates are immediately subject to their provincial superior, in the character of friars but depend on the diocesan bishop in their quality of parish priests; and in like manner obey

Dual supervision over friars their own provincial vicars, as well as those of the bishop. They are alternately eligible to the dignities of their own order, and generally promoted, or relieved from their ministry, at the discretion of the provincial chapter, or according to the final determination of the vice-patron or bishop, affixed to the triple list presented to him. Besides the ordinary obligations attached to the care of souls, they are enjoined to assist at the elections of governors and other officers of justice, in their respective towns, in order to inform the chief magistrate respecting the aptitude of the persons proposed for election on the triple lists, and to point out the legal defects attributable to any of them. On this account, they are not, however, allowed to interfere in the smallest degree with any of these proceedings, and much less make a formal proposal, as most assuredly would be advisable if permitted so to do, in favor of any particular person or persons in their opinion fit for the discharge of the above mentioned duties. It is their obligation to ascertain the correctness of the tribute lists presented to them for their examination and signature by the chief of the clans, by carefully comparing them with the registers kept in their own department; and also to certify the general returns, without which requisite the statements transmitted by the chief magistrates to the accountant-general's office are not admitted. Above all they are bound to affix their signatures to the effective payments made by the magistrate to their parishioners on account of daily labor, and to certify similarly the value of materials employed in public works. Besides the above, they are continually called upon to draw up circumstantial reports, or declarations, required by the superior tribunals; they receive frequent injunctions to co-operate in the increase of the king's revenue and the encouragement of agriculture and industry; in a word, there is scarcely a thing to which their attention is not called, and to which it is not expected they should contribute by their influence, directly or indirectly.

The royal treasury pays them an annual allowance equal to Allowances $\$ 180$, in kind and money, for each five hundred tributes under their from treasury.
care, and this, added to the emoluments of the church, renders the total proceeds of a curacy generally equivalent to about from six to eight reals for each entire tribute; but from this allowance are to be deducted the expenses of coadjutors, subsistence, servants, horses, and all the other charges arising out of the administration of such wearisome duties; nor are the parishioners under any other obligation than to provide the churches with assistants, or sacristans and singers, and the curates with provisions at tariff prices.

Need of more European clergy.

Finally, as from what has been above stated it would appear, that as many as five hundred religious persons are necessary for the spiritual administration of the interior towns and districts, besides the number requisite to do the duty and fill the dignities of the respective orders and convents in the capital, independent of which there ought to be a proportionate surplus, applicable to the progressive reduction of the infidel tribes inhabiting the uplands, as well as the preaching of the Gospel in China and Cochinchina, most assuredly, it would be expedient to assemble and keep together a body of no less than seven hundred persons, if it is the wish of the government, on a tolerable scale, to provide for the wants of these remote missions. At the present moment the number does not exceed three hundred, including superannuated, exempt from service, and lay-brothers, whilst the native clergymen in effective possession of curacies, and including substitutes, coadjutors and weekly preachers, exceed one thousand. And as the latter, in general unworthy of the priesthood, are rather injurious than really serviceable to the state, it should not be deemed unjust if they were altogether deprived of the dignity of parish curates, and only allowed to exercise their functions in necessary cases, or by attaching them to the curacies in the quality of coadjutors. By this plan, at the same time that the towns would be provided with suitable and adequate ministers, the native clergymen would be distributed in a proper manner and placed near the religious persons charged to officiate, would acquire the necessary knowledge and decorum, and in the course of time might obtain character and respect among their countrymen.

To many, a measure of this kind may, in some respects, appear harsh and arbitrary; but persons, practically acquainted with the subject and country, will deem it indispensable, and the only means that can be resorted to, in order to stop the rapid decline remarkable in this interesting department of public administration. Fortunately, no grounded objections can be alleged against it; nor is there any danger of serious consequences resulting from the plan being
carried into effect. In vain would it be to argue that, if the reform is to take place, a large number of priests would be reduced to beggary, owing to the want of occupation; because, as things now stand, many of the religious curates employ three or four coadjutors, and, no doubt, they would then gladly undertake to make provision for the remainder of those who may be thrown out of employment. On the other hand, with equal truth it may be observed that the inhabitants of the interior, far from regretting, or taking part on behalf of the native clergy, would celebrate, as a day of gladness and rejoicing, the removal of the latter, in return for their beloved Castilian Fathers.

In case the ideas above suggested should be adopted in all their parts, it may be proper to add that an injunction ought to be laid on the reverend bishops in future to confer holy orders with more scrupulosity and economy, than, unfortunately, heretofore has been the case; by representing to them that, if, at certain periods the Popes have been influenced by powerful reasons not to insist on ordinations taking place in Europe, as was formerly the case, very weighty motives now equally urge the government to decline, in the Philippine Islands, paying so much to religious vocation, and to relax in the policy of raising the natives to the dignity of the priesthood.

Long have the inhabitants of the Philippines deplored, and in vain remonstrated, against the ravages committed on their coasts and settlements by the barbarous natives of the Islands of Mindanao, Basilan and Jolo, as well as by the Malanos, Ilanos and Tirone Moros and others; and there is nothing that so much deserves the attention, and interests the honor of the Captain-General commanding in this quarter, as an early and efficient attempt to check and punish these cruel enemies. It is indeed true that, in the years 1636 and 1638, General Don Sebastian Hurtado de Corcuera, undertook in person and happily carried into effect the reduction of the Sultan of Mindanao and the conquest of the Island of Jolo, placing in the latter a governor and establishing three military posts there; under the protection of the garrisons of which, Christianity was considerably extended. It is equally true, that on the subsequent abandonment of this important acquisition, owing to the government being compelled to attend to other urgent matters, the enemy acquired a greater degree of audacity, and the captain-general in command afterwards sent armaments to check his inroads. On one of these occasions, our troops obliged an army of more than 5,000 Moros, who had closely beset the fortress of Zamboanga, to raise

Restriction of native ordinations recommended

Moro depredations.
the siege; and also in the years 1731 and 1734, fresh detachments of our men were landed on the Islands of Jolo, Capul and Basilan, and their success was followed by the destruction and ruin of the fortified posts, vessels, and settlements of those perfidious Mahometans. It is not, however, less certain that at the periods above mentioned, the war was carried on rather from motives of punishment and revenge, and suggested by a sudden and passing zeal, than in conformity to any progressive and well-combined system. Since then these laudable military enterprises have been entirely neglected, as well on account of the indolence of some of the governors, as the too great confidence placed in the protestations of friendship and treaties of peace with which, from time to time, the Sultans of Jolo and Mindanao have sought to lull them to sleep. Their want of sincerity is proved by the circumstance of the piracies of their respective subjects not ceasing, the chiefs sometimes feigning they were carried on without their license or knowledge; and, at others, excusing themselves on the plea of their inability to restrain the insolence of the Tirones and other independent tribes. Nevertheless, it is notorious that the above-mentioned sultans indirectly encouraged the practice of privateering, by affording every aid in their power to those who fitted out vessels, and purchasing from the pirates all the Christians they captured and brought to them.

A missionary's
appeal.

Father Juan Angeles, superior of the mission established in Jolo, at the request of Sultan Alimudin himself (or Ferdinand I as he was afterwards unworthily called on being made a Christian with no other view than the better to gain the confidence of the Spaniards) in a report he sent to the government from the above Island, under date of September 24, 1748, describing the Sultan's singular artifices to amuse him and frustrate the object of his mission, fully confirms all that has just been said, and, on closing his report, makes use of the following remarkable words:

[^193]they must be attacked on land, and in their posts in the interior; for it is much more advisable at once to spend ten with advantage and in a strenuous manner to attain an important object than to lay out twenty by degrees and without fruit."

It is an undeniable fact that the government, lulled and deceived by the frequent embassies and submissive and crouching letters which those fawning sultans have been in the habit of transmitting to them, instead of adopting the energetic measures urged by the abovementioned missionary, have constantly endeavored to renew and secure the friendship of those chiefs, by means of treaties and commercial relations; granting, with this view, ample licenses to every one who ventured to ship merchandise to Jolo, and winking at the traffic carried on by the governors of the fortress of Zamboanga with the people of Mindanao; whilst the latter, on their part, sporting with our foolish credulity, have never ceased waging a most destructive war against us, by attacking our towns situated on the coast, not even excepting those of the Island of Luzon. They have sometimes carried their audacity so far as to show themselves in the neighborhood of the capital itself, and at others taken up their temporary residence in the district of Mindoro and in places of the jurisdictions of Samar and Leyte; and in short, even dared to form an establishment or general deposit for their plunder in the Island of Buras, where they quietly remained during the years 1797, 1798 and 1799 to the great injury of our commerce and settlements.

This want of exertion to remedy evils of so grievous a nature is the more to be deplored as the Philippine governors have at all times been fully authorized to carry on war, and promote the de-

Governmental lenience. struction of the Moros, under every sacrifice, and especially by the royal orders and decrees of October 26, and November 1, 1758, and July 31, 1766, in all of which his majesty recommends, in the most earnest manner, "the importance of punishing the audacity of the barbarous infidels, his majesty being desirous that, in order to maintain his subjects of the Philippines free from the piracies and captivity they so frequently experience, no expenses or pains should be spared; it being further declared, that as this is an object deeply affecting the conscience of his majesty, he especially enjoins the aforesaid government to observe his order; and finally, with a view to provide for the exigencies arising out of similar enterprises, the viceroy of New Spain is instructed to attend to the punctual remittance, not only of the usual "situado," or annual allowance, but also of the additional sum of $\$ 70,000$ in the first and succeeding years, etc." In a word, our monarchs, Ferdinand VI and Carlos III, omit-

Authority for war not lacking.
ted nothing that could in any way promote so important an object; whether it is that the governors have disregarded such repeated orders from the sovereigns, or mistaken the means by which they were to be carried into effect, certain it is that the unhappy inhabitants of the Philippines have continued to be witnesses, and at the same time the victims of the culpable apathy of those who have successively held the command of these Islands within the last fifty or sixty years.

Native efforts
for self-defence.

Moro piratical craft.

Abandoned therefore to their own resouces, and from time to time relieved by the presence of a few gunboats which, after scouring the coasts, have never been able to come up with the light and fast sailing vessels of the enemy, the inhabitants of our towns and settlements have been under the necessity of intrenching and fortifying themselves in the best way they were able, by opening ditches and planting a breastwork of stakes and palisades, crowned with watch towers, or a wooden or stone castle; precautions which sometimes are not sufficient against the nocturnal irruptions and robberies of the Moros, more especially when they come with any strength and firearms, in general scarce among the natives.

The pancos, or prows, used by the Moros, are light and simple vessels, built with numerous thin planks and ribs, with a small draft of water; and being manned by dexterous rowers, they appear and disappear from the horizon with equal celerity, flying or attacking, whenever they can do it with evident advantage. Some of those vessels are large, and fitted out with fifty, a hundred, and sometimes two hundred men. The shots of their scanty and defective artillery are very uncertain, because they generally carry their guns suspended in slings; but they are to be dreaded, and are extremely dexterous in the management of the campilan, or sword, of which they wear the blades long and well tempered. When they have any attack of importance in view, they generally assemble to the number of two hundred galleys, or more, and even in their ordinary cruises, a considerable number navigate together. As dread and the scarcity of inhabitants in the Bisayan Islands cause great ranges of the coast to be left unsettled, it is very easy for the Moros to find numerous lurking-places and strongholds whenever they are pressed, and their constant practice, in these cases, is to enter the rivers, ground their vessels, and hide them among the mangroves and thick foliage, and fly with their arms to the mountains, thus almost always laughing at the efforts of their opponents, who seldom venture to follow them into the thickets and morasses, where the musket is of no use and a single step cannot be taken with any security.

The fatal consequences and ravages of this system of cruising and warfare round the Islands are incalculable. Besides plundering and burning the towns and settlements, these bloody pirates put the old and helpless to the sword, destroy the cattle and plantations, and annually carry off to their own homes as many as a thousand captives of both sexes, who, if they are poor and without hopes of being redeemed, are destined to drag out a miserable existence amidst the most fatiguing and painful labor, sometimes accompanied with torments. Such is the dread and apprehension of these seas that only those navigate and carry on trade in them who are able to arm and man their vessels in a way corresponding to the great risks they have to run, or others whom want compels to disregard the imminent dangers which await them. Among the latter class, the Bisayans, or 'painted (tattooed) natives," are distinguished, an extremely warlike people of whom great use might be made. Reared from their infancy amidst danger and battle, and greatly resembling the Moros in their features and darkness of skin, they are equally alike in the agility with which they manage the long sword and lance, and such is the courage and implacable odium with which they treat their enemies that, if not taken by surprise, they sell their lives very dear, sacrificing themselves in a most heroic manner, rather than to be led away as captives.

In order, however, that a more correct idea may be formed of the wicked policy and atrocious disposition of these Moros, and with a view to do away with the misconceptions of those who are of opinion that incentives to trade, and other slow and indirect means ought to be employed for the purpose of overcoming them, it will suffice to quote the following examples among a number of others, even more recent ones, which might equally be brought forward.

In 1796, the governor of Zamboanga dispatched, with regular passports and under a safe conduct obtained from the Sultan of Mindanao, Lieutenant Don Pantaleon Arcillas, with a sergeant, eight men, and a guide, in order to bring into the fortress the cattle belonging to the king's farm, which had strayed away and got up in the lands of the above-mentioned Mahometan prince. Five days after their departure, whilst the lieutenant was taking his meals at the house of a "Datu," or chief, named Oroncaya, he was suddenly surrounded by seventy Moros, who, seizing upon him, bound him to a tree and then flayed him alive, from the forehead to the ankle. In this miserable and defenceless situation, the barbarous
"Datu" wreaked his vengeance on his body by piercing it all over with his "kris," or dagger, and then ordered his skin to be hung up on the pole of one of his ferocious banners.

In the year 1798, whilst the schooner San José lay at anchor at Tabitabi, near Jolo, the sons-in-law and nephews of the sultan went out to meet her in two large prows, exhibiting at the same time every demonstration of peace, and, sending forward a small vessel with refreshments, they invited the captain to come on board of them. The latter, deceived by the apparent frankness and high rank of the Moros, with the greatest good faith accepted the invitation, and proceeded on board, accompanied by two sailors, with a view to make arrangements for barter. Scarcely had they got on board of the large prow, when they were surrounded and seized, and the captain, who was a Spaniard, compelled to sign an order to his mate to deliver up the schooner, which he reluctantly did, under the hope of saving his own and his companions' lives. The Moros proceeded on board the Spanish vessel, and, in the meantime, the two sailors were taken back to the boat, and there killed with daggers in the presence of all. The schooner's sails were next hoisted, and she was brought into Jolo, where the cargo and crew were sold in sight of, and with the knowledge and consent of the sultan; an atrocity for which he has always refused to give any satisfaction to a nation, thus openly and barbarously outraged by his own relatives, and in defiance of the existing treaties of peace. Such is the cruel character, and such the execrable policy of the Moros generally inhabiting the Islands situated in the Philippine seas.

Growth of Moro power.

The most lamentable circumstance is, that these infidel races, at all times to be dreaded, owing to their numbers and savage ferocity, after the lapse of a century of almost uninterrupted prosperity, and encouraged also by our inattention, have at length gradually attained so formidable a degree of power, that their reduction now must be considered an extremely arduous and expensive enterprise, although an object urgently requisite, and worthy of the greatness of a nation like ours. In order, however, that the difficulties of so important an undertaking may be justly appreciated, it may be proper to observe that the Island of Mindanao alone, at the present moment, contains a population equal, if not larger, than that of Luzon, and the margins of the immense lake, situated in its center, are covered with well-built towns, filled with conveniences, the fruits of their annual privateering, and of the traffic they carry on with the inhabitants of the Island of Jolo. True it is, and it may be said, equally fortunate, that they are greaily divided into
parties, subject to a variety of "datus," or independent chiefs, in name only inf rior to the one who styles himself the sultan of the whole Island. As, however, the fortresses and districts of Caraga, Misamis, and Zamboanga occupy nearly three parts of the circumference of the Island, these Moros freely possess no more than the southern part, commencing at about twenty-ive leagues from Cape San Augusin, and ending in the vicinity of Zamboanga; so that the largest number of their naval armaments are fitted out and issued to sea, either by the great river of Mindanao, or from some of the many bays and inlets situated on the above extent of coast.

The Island of Jolo, although small compared with that of Jolv. Mindanao, is, nevertheless, in itself the most important, as well as the real hotbed of all the piracies committed. Its inhabitants, according to the unanimous reports of captives and various merchants, in skill and valor greatly exceed the other Mahometans who infest these seas. The sultan is absolute, and his subjects carry on trade with Borneo, Celebes, and the other Malayan tribes scattered about this great Archipelago. In the port of Jolo, as already noticed, sales are made of Christians captured by the other Moros. The Chinese of Amoy, as well as the Dutch and British, carry them manufactured goods, opium and arms, receiving, in return, black pepper, bees' wax, balato, edible nests, tortoise-shell, mother-of-pearl, gold dust, pearls, etc., and from Manila also a vessel usually goes once a year with goods; but all act with the greatest precaution in this dangerous traffic, guarding, as much as possible, against the insidious acts of that perfidious government. The great number of renegades, of all casts, who have successively naturalized themselves there; the abundance of arms, and the prevailing opulence, have, in every respect, contributed to render this Island a formidable and powerful state. The capital is surrounded with forts and thick walls, and the famous heights, standing near it, in case of emergency, afford a secure asylum where the women can take refuge and the treasures of the sultan and public be deposited, whilst in the plains below the contest may be maintained by more than 50,000 combatants, already very dexterous in the use of the musket and of a bold and courageous character. The navy of these Islanders is also very respectable, for, besides a great number of smaller prows and warboats, they have some of a large size, capable of carrying heavy artillery on their decks, mounted on corresponding carriages, and not suspended in slings as is the custom of the people of Mindanao. In a word, Jolo is an Island governed by a system of administration extremely vigorous and decisive; dread and superstition sustain
the throne of the tyrant, and the fame of his greatness frequently brings to his feet the ulemas, or missionaries of the Koran, even as far as from the furthest margin of the Red Sea. The prince and people, unanimous in the implacable odium with which they view all Christians, cannot be divided or kept on terms of peace; and if it is really wished to free these seas from the evils and great dangers with which they are at all times threatened, it is necessary at once to strike at the root, by landing and attacking the Jolonese in their strongholds, and break the charm by which they are held together.

This, at least, is the constant and unshaken opinion of all experienced persons and those versed in Philippine affairs; and if, by the substantial reasons and existing circumstances, I convince myself sufficiently to openly recommend war to be undertaken against the Moros and pushed with the utmost vigor, and more particularly commencing the work by a formal invasion of Jolo; still, as I feel myself incompetent to trace a precise plan, or to discuss the minute details more immediately connected with the object, I feel it necessary to confine myself to the pointing out, in general terms, of the means I judge most conducive to the happy issue of so arduous but important an enterprise, leaving the rest to more able and experienced hands.

As a previous step, I conceive that a council of war ought to be formed in Manila, composed of the captain-general, the commanders of the navy, artillery, and engineer department, as well as of the regular corps, who, in conformity to all the antecedent information lodged in the secretary's office for the captain-generalship, and the previous report of some one of the ex-governors of $Z$ amboanga and the best informed missionaries, may be enabled to deliberate and proceed on to a mature examination of the whole affair, taking into their special consideration everything regarding Jolo, its early reduction, the number of vessels and men required for this purpose, the most advantageous points of attack, and the best season in which this can be carried into execution. After all these matters have been determined upon, the operation in question ought to be connected with the other partial and general arrangements of the government, in order that a plan the best adapted to localities and existing circumstances may be chosen, and without its being necessary to wait for the king's approbation of the means resolved upon, owing to the distance of the court and the necessity of acting with celerity. If, however, on account of the deference in every respect due to the sovereign, it should be thought proper to reconcile his previous sanction with the necessity of acting without loss of time, the best
mode would be to send from Spain an officer of high rank, fully authorized, who, as practised on other occasions, might give his sanction, in the name of the king, to the resolutions adopted by the council of war, and take under his own immediate charge, if it should be so deemed expedient, the command of the expedition against Jolo, receiving the appointment of governor of the Island, as soon as the conquest should be carried into effect, as a just reward for his zeal and valor.

Supposing an uniformity of opinions to prevail with regard to the expediency of attempting the subjugation of Jolo, and supposing also the existence of the necessary funds to meet the expenses of a corresponding armament, it may be positively relied upon that the project would be extremely popular, and meet with the entire concurrence and support of the Philippine Islands. The military men, aware of the great riches known to exist in the proposed theatre of operations, would emulously come forward to offer their services, under a hope of sharing the booty, and the warlike natives of the Bisayas would be impelled on by their hatred to the Moros, and their ardent wishes to avenge the blood of their fathers and children. On the other hand, the abundance of regular and well disciplined cfficers and troops, at present in the colony and the number of gunboats found in the ports, a want of which, on other oceasions, has always been experienced, will afford ample scope for the equipment of a force competent to the important enterprise in view. In fact, if the operation is arranged in a systematic manner, and all the precautions and rules observed as are usual in cases of attacks premeditated against European and civilized establishments, there is no reason to expect any other than a flattering and decisive result, since, in reality, the whole would be directed against an enemy contemptible on account of his barbarism and his comparative ignorance of the art of war.

The preparations deemed necessary being made in Manila, and the Bisayan auxiliaries assembled beforehand in Zamboanga, with their arms and respective chiefs, the whole of the operation in question, it may be safely said, might be terminated within the period of three or four months. Supposing even 2,000 regular troops are destined for this expedition, with a corresponding train of field pieces, and at the moment there should not be found in the Islands a sufficient number of larger vessels to embargo or freight for their conveyance, a competent quantity of coasters, galleys and small craft might be met with at any time sufficiently capacious and secure to carry the men. This substitute will be found the less

War popular in Philippines.

## Native

 assistance.inconvenient, because, as the navigation is tobe performed among the Islands during the prevalence of the north winds, usually a favorable and steady season of the year, the voyage will consequently be safe and easy. It will also be possible to arrive at the point agreed upon, as a general rendezvous, in twenty, or five-and-twenty days, which place, for many reasons, ought to be the fortress of Zamboanga, situated in front of Jolo and at moderate distance from that Island; it being from this port that, in former times, the Philippine governors usually sent out their armaments, destined to make war against the Basilanese and Jolonese.

As soon as this important and memorable enterprise has been carried into effect, and the punishment and total subjugation of these faithless Mahometans completed and the new conquest placed under a military authority, in the mean time that the lands are distributing and arrangements making to establish the civil administration, on the same plan followed in the other provinces of the Philippine government, the armament ought to return to Zamboanga with all possible speed; but, after stopping by the way to reduce the small island of Basilan and leaving a fortress and garrison there. Immediately afterwards, and before the various tribes of Moros inhabiting the Island of Mindanao have been able to concert among themselves and prepare for their defence, it would be advisable to direct partial expeditions towards both flanks of Zamboanga, for the purpose of burning the settlements of the natives and driving them from the shores into the interior. Forts ought then to be raised at the mouths of the inlets and rivers, and a fourth district government formed in the southern part of the island; in such manner that, by possession being taken of the coasts, the government and district of Zamboanga may be placed in contact with the new one established on the one side, and on the other with the district of Misamis, also the new district with that of Caraga, the western part of which territory is already united to that of Misamis. Such, at least, was the opinion of Lieutenant-Colonel Don Mariano Tobias, an officer deservedly celebrated for his prudence and consummate skill in these matters, and this he substantially expressed in a council of war, held on August 28, 1778, for the purpose of deliberating on the most advisable means to check the Moros, as appears by a long and intelligent report drawn upon this subject on April 26, 1800, by the adjutant-general of this colony, Don Rufino Suarez.

In case it should be determined to adopt the means proposed by Colonel Tobias, for the purpose of holding the Moros of Mindanao in check, and to which, unfortunately, due regard has not hitherto
been paid, notwithstanding the enterprise presents very few difficulties, owing to the little opposition to be expected from the infidel natives, the latter would then be left completely surrounded and shut up in the heart of the island, and their active system of privateering, with which they have so many years infested these seas, entirely destroyed. If, through the want of garrisons and population, it should not, however, be possible to deprive them of all their outlets, by which means they would still be able occasionally to send some of their cruising vessels, nevertheless there would be facilities with which it would be possible to pursue and counteract the ravages of the few pirates who might furtively escape out of some river, . while now they are fitted out, and well manned and armed to the number of one and two hundred war-boats, openly in their ports.

After the emporiums of slavery have been destroyed by the conquest of Jolo, and the other general measures adopted, as above pointed out, the government would then be in a situation to turn its attention, with much greater ease, to the arrangement of all the other minor schemes of precaution and protection suited to the difference of circumstances and locality, without the concurrence of which the work would be left imperfect, and in some degree the existence of those settled in the new establishments rendered precarious. As, however, I am unprepared minutely to point out the nature of these measures, or distinctly to lay down a ground-work for future civilization and improvement, I shall merely observe, that what would then remain to be done would neither require any great capital, or present obstacles which might not easily be overcome. The Moros being then concentrated in the Island of Mindanao, and this completely surrounded on all sides by our forts and settlements, in the manner above described, the only enemies let loose on these seas would be either the few who might, from time to time, elude the vigilance of our troops and district-commanders, or those who might have escaped from Jolo previous to its conquest, and taken up their abode in one or other of the Bisayas Islands; or, in short, such as are out cruising at the time our armament returns to Zamboanga and takes possession of the southern coast of Mindanao; in which case they would be compelled to resort to a roving life, establishing, like the Jolo fugitives, temporary dwellings among the mangroves and thickets bordering on the shore.

The principal objects then remaining for the attention of government would be to guard and protect the towns and settlements established on the coasts from the insults and inroads of banditti, impelled by necessity or despair, and at the same time to promote
the gradual overthrow or civilization of the dispersed remnant of Moorish population left in the Island. The cruising of the pirates being thus reduced to a space comprehended in an oblong circle formed by an imaginary line drawn from the southern extreme of the Island of Leyte, to the south-west point of Samar, which next running along the north-west coast of Mindoro, on the outside of Tacao and Burias, and coming down to the west of Panay, Negros and Bohol, closes the oval at the little island formed by the Strait of Panaon, about forty gunboats might be advantageously stationed in the narrowest passages from land to land; as, for example, in the Strait of San Juanico and other passes of a similar kind, well known to the local pilots. By this means, the limits would be gradually contracted. Various small naval armaments ought, at the same time, to keep cruising in the center of this circle, pursuing the Moros by sea and land, dislodging them from their strongholds and lurking places, and sending on those who might be captured to the depot pointed out by government.

The first part of the plan would be the more easily realized, as it is well-known that most of the districts corresponding to the Bisayan tribes, including those of Camarines and Albay, situated at the extremity of the island of Luzon, have several gunboats of their own, which might be used with great advantage. By merely advancing and stationing them in such channels as the Moros must necessarily pass, either in going out or returning, according to the different monsoons, they would easily be checked, without removing the gunboats to any great distance from their own coasts. As besides the great advantages resulting from this plan and every one doing his duty are apparent, no doubt numbers of natives would volunteer their services, more particularly if they were liberally rewarded, and their maintenance provided from the funds of the respective communities. Moreover, the points which at first should not be considered as sufficiently guarded might be strengthened by the king's gunboats, and, indeed, in all of them it would be advisable to station some of the latter, commanded by a select officer, to whose orders the captains of the provincial gunboats ought to be made subservient.

With regard to the second part, it will suffice to observe that the captain-generalship of the Philippine Islands already possesses as many as seventy gunboats, besides a considerable number of gallies and launches, which altogether constitute a formidable squadron of light vessels; and, after deducting those deemed necessary for the protection of Jolo and the new province to be established
in Mindanao, a sufficient number would still be left to carry into execution all the objects proposed. At present, although the Moros navigate in numerous divions, and with a confidence inspired by their undisturbed prosperity, a 24 -pounder shot from one of our launches is nevertheless sufficient to put them to flight; what therefore may not be expected when their forces shall be so greatly diminished and their apprehensions increased, of being defeated and captured? Nevertheless, as it is not easy for our gunboats to come up with them, when giving chase, it would be advisable to add to our cruisers a temporary establishment of prows and light vessels, manned by Bisayan Indians, which, by advancing on with the gallies, might attack the enemy and give time for the gunboats to come up and decide the action. Besides as the Bisayan Indians are perfectly acquainted with the mode of making war on the Moros, the meaning of their signals and manoeuvers and the kind of places on shore in which they take shelter when pursued at sea, the employment of such auxiliaries would be extremely useful.

The whole of these defensive and offensive arrangements would, however, be ineffectual or incomplete in their results, if the most perfect union and concert is not established in every part, so that

Need of undivided leadership. all should conspire to the same object, although by distinct means. In order therefore that the necessary harmony may be secured, it would be expedient to remove the chief authority nearer to the theater of war, by confiding all the necessary instructions and powers to the person who might be selected for the direction and command of the enterprise, after the general plan of operations had been regularly approved. Under this impression, and with a view to the better execution of all the details, it would be advisable for the commanding officer, named by the government, to take up his headquarters in the Island of Panay, which, owing to its geographical situation, the great number of towns and inhabitants contained in the three provinces into which it is divided, as well as other political reasons, is generally esteemed preferable for the object in question, to the Island of Zebu, where, in former times, the commanders of the province of the painted natives resided, as mentioned in the laws of the Indies. The center of action being placed in Iloilo, a communication with the other points would thus more easily be kept open, aid and relief might be sent more rapidly to the quarter where required, and, in a word, all the movements, of whatsoever kind they might be, would be executed with greater precision and certainty of success. It would be unnecessary to add that the provincial magistrates of Camarines and Albay ought to co-operate,
with their fourteen gunboats and other smaller vessels, in the measures adopted by the commander of the Bisayan establishment, distributing their forces according to the orders given by him, and by undertaking to guard the straits of San Bernardino.
Parainu.
The Island of Paragua, at the head of which the provincial jurisdiction of Calamianes is placed, is not included in the great circle, or chain of stations, above traced out, as well in consequence of its great distance from the other islands, for which reason it is not so much infested by the Moros, as because of its being at present nearly depopulated and uncultivated, and for these reasons the attention of government ought not to be withdrawn from other more important points. With regard to that of Mindanao, the necessity of keeping up along the whole of its immense coast, a line of castles and watch towers, has already been fully pointed out, more especially in the vicinity of the bay of Panguil, to the north, and the mouths of the great river towards the south; the two points in which the enemies' most formidable armaments are usually fitted out. Consequently, it would not be possible to expect the provincial commanders stationed there would be able to disengage any part of their naval force, in order to place it at the disposal of the officer commanding the Bisayan vessels. Indeed, it is obvious that it would be extremely important to afford the people of Mindanao every possible additional aid, in vessels, troops and money, in order the better to check the sailing of partial divisions of the enemy, and thus prevent the immense number of pirates, inhabiting the interior of the island, from breaking the fortified line, and again covering these seas, and with redoubled fury carrying death and desolation along all the coasts.

It would, in fact, be extremely desirable if, through the concerted measures and constant vigilance of the four chief magistrates intrusted with the command of the island, the future attempts of the Mindanayans could be entirely counteracted, and their cruisers altogether kept within the line for a certain period of years; as by thus depriving them of the facilities to continue their old habits of life, these barbarous tribes would be eventually compelled to adopt other pursuits, either by ascending the mountainous parts of the island, and shutting themselves up in the thick and impenetrable forests, with a view to preserve their independence; or, throwing down their arms and devoting themselves to the peaceful cultivation of their lands. In the latter case, they would gradually lose their present ferocious character; their regard for the conveniences and repose of social life would increase; the contrast would be attended
with most favorable consequences, and in the course of time, the whole of the aboriginal natives of these islands would come into our laws and customs, and become confounded in the general mass of Philippine subjects, owing allegiance to the king.

Finally, it must be equally acknowledged that the Islands of Jolo, Basilan, Capul, and some of the other inferior ones, of which, as above pointed out, an union ought to be formed in the way of an additional government, subordinate to the captain-general, would be able to co-operate in the war on no other plan than the one traced out for the provinces held in Mindanao; that is, by their gunboats being confided to the protection of their own coasts; though with this difference, that if, in one instance, the main object would be to prevent the evasion of the enemy, in the other every effort must be employed to guard against and repel their incursions when they do appear. However, complete the success of the armament, destined for the reduction of Jolo, it may nevertheless be presumed, that the mountains would still continue to give shelter to hordes of fugitives, who would take refuge in the fastnesses, and avail themselves of every opportunity to concert plans, or fly off to join their comrades in Mindanao, in order to return, and through their aid, satisfy their thirst for vengeance, by surprising some fortress or settlement, or establishing themselves on some neglected and not well known point. In consequence of this, the governor, commanding there, would at first require the active co-operation of all his forces, for the purpose of consolidating the new conquest, and causing his authority to be respected throughout the island.

These, in my opinion, are the true and secure means by which the enemies of the peace and prosperity of the Philippines may be humbled, their piracies prevented, and a basis laid for the future civilization of the remaining islands in this important Archipelago. To this sketch, a number of other details and essential illustrations, no doubt, are wanting; and possibly, I may be accused of some inaccuracies, in discussing a topic, with which I candidly avow I cannot be considered altogether familiar. The plan and success of the enterprise must, however, greatly depend on military skill and talent; but as I have attempted no more than fairly to trace the general outline of the plan, and insist on the necessity of its adoption, my remarks, it is to be hoped, will serve to awaken a serious disposition to review and investigate the whole subject, a task that most assuredly ought to be confided to a competent and special council. Whatever defects I may involuntarily have fallen into, will then be corrected; at the same time it ought not to appear strange that

Importance of peace for Philippine progress.
inexperienced persons should presume to speak on matters connected with the public good, when we see them so much neglected by those whose more immediate duty it is to look after and promote them. At all events, dispassionate zeal has seldom done harm; and I again repeat, that my wish is not so much to see my own ideas adopted, as to urge the necessity of their being examined and digested. I am desirous that other sources of information on this subject should be explored, that practical men should be called in, and that those in power should be induced to apply themselves and devote their exertions to an object so highly deserving of their attention. In short, I am anxious that the pious injunctions of our monarchs should be fulfilled, and that the tears and blood of the inhabitants of these neglected islands should cease to flow.

Should the happy day ever arrive, when the inhabitants of these provinces shall behold themselves free from the cruel scourge with which they have been desolated for so many years, they will bless the nation that has redeemed them from all their cares, they will tighten their relations with it, and deliver themselves up to its direction without reserve. The natives will then come down from the strong fastnesses they at present inhabit; they will clear fresh lands, and earnestly devote themselves to tillage and industry, Under the shadow of peace, population and commerce will increase; the Bisayan vessels will then plough the ocean without the dread of other enemies than the elements; and the Moros themselves of Mindanao (I say it with confidence), straightened on all sides, and incessantly harassed by the Christians, but on the other hand witnessing the advantages and mildness of our laws, will at length submit to the dominion of the monarchs of Spain, who will thus secure the quiet possession of one of the most interesting portions of the habitable globe, and be justly entitled to the gratitude of all nations connected with China and India, for having put an end to a series of the most terrific plunder and captivity that ever disgraced the annals of any age.

## MANILA IN 1842

By COM. CHARLES WILKES, U. S. N.

(Narrative of U. S. Exploring Expedition, Vol. V, Chaps. 8 and 9.)

At daylight, on January 13, we were again under way, with a light air, and at nine o'clock reached the roadstead, where we anchored in six fathoms water, with good holding-ground. Being anxious to obtain our letters, which, we were informed at Oahu, had been sent to Manila, I immediately dispatched two boats to procure them. On their way to the mole, they were stopped by the captain of the port, Don Juan Salomon, who requested them, in a polite manner, to return, and informed the officers that, agreeably to the rules of the port, no boat was permitted to land until the visit of the healthofficer had been made, etc.

The captain of the port, in a large barge, was soon seen pulling off in company with the boats. He boarded us with much ceremony, and a few moments sufficed to satisfy him of the good health of the crew, when he readily gave his assent to our visiting the shore. Every kind of assistance was offered me, on the part of the government, and he, in the most obliging manner, gave us permission to go and come when we pleased, with the simple request that the boats should wear our national flag, that they might at all times be known, and thus be free from any interruption by the guards. The boats were again dispatched for the consul and letters, and after being anxiously watched for, returned; every one on board ship expecting his wishes to be gratified with news from home; but, as is usual on such occasions, the number of the happy few bore no comparison to that of the many who were disappointed.

Our vice-consul, Josiah Moore, Esq., soon paid us a visit, and gave us a pressing invitation to take up our quarters on shore while we remained. To this gentleman and Mr. Sturges I am greatly indebted for much of the information that will be detailed in the following chapter.

A number of vessels were lying in the roads, among which were several Americans loading with hemp. There was also a large English East Indiaman, manned by Lascars, whose noise rendered her more like a floating Bedlam than any thing else to which I can liken it.

The view of the city and country around Manila partakes both of a Spanish and an Oriental character. The sombre and heavylooking churches, with their awkward towers; the long lines of batteries mounted with heavy cannon; the massive houses, with ranges of balconies; and the light and airy cottage, elevated on posts, situated in the luxuriant groves of tropical trees-all excite a desire to become better acquainted with the country.

Manila is situated on an extensive plain, gradually swelling into Surroundings. distant hills, beyond which, again, mountains rise in the back ground to the height of several thousand feet. The latter are apparently

Port rules

Official
courtesies.
-

American hemp ships.

A Spanish
oriental city.
clothed with vegetation to their summits. The city is in strong contrast to this luxuriant scenery, bearing evident marks of decay, particularly in the churches, whose steeples and tile roofs have a dilapidated look. The site of the city does not appear to have been well chosen, it having apparently been selected entirely for the convenience of commerce, and the communication that the outlet of the lake affords for the batteaux that transport the produce from the shores of the Laguna de Bay to the city.

There are many arms or branches to this stream, which have been converted into canals; and almost any part of Manila may now be reached in a banca.

In the afternoon, in company with Captain Hudson, I paid my first visit to Manila. The anchorage considered safest for large ships is nearly three miles from the shore, but smaller vessels may lie much nearer, and even enter the canal; a facility of which a number of these take advantage, to accomplish any repairs they may have occasion to make.

The canal, however, is generally filled with coasting vessels, batteaux from the lake, and lighters for the discharge of the vessels lying in the roads. The bay of Manila is safe, excepting during the change of the monsoons, when it is subject to the typhoons of the China Seas, within whose range it lies. These blow at times with much force, and cause great damage. Foreign vessels have, however, kept this anchorage, and rode out these storms in safety; but native as well as Spanish vessels, seek at these times the port of Cavite, about three leagues to the southwest, at the entrance of the bay, which is perfectly secure. Here the government dockyard is situated, and this harbor is consequently the resort of the few gunboats and galleys that are stationed here.

The entrance to the canal or river Pasig is three hundred feet wide, and is enclosed between two well-constructed piers, which extend for some distance into the bay. On the end of one of these is the light-house, and on the other a guard-house. The walls of these piers are about four feet above ordinary high water, and include the natural channel of the river, whose current sets out with some force, particularly when the ebb is making in the bay.

The suburbs, or Binondo quarter, contain more inhabitants than the city itself, and is the commercial town. They have all the stir and life incident to a large population actively engaged in trade, and in this respect the contrast with the city proper is great.
Walled city.
The city of Manila is built in the form of a large segment of a circle, having the chord of the segment on the river: the whole is strongly fortified, with walls and ditches. The houses are substantially built after the fashion of the mother country. Within the walls are the governor's palace, custom-house, treasury, admiralty, several churches, convents, and charitable institutions, a university, and the barracks for the troops; it also contains some public squares, on one of which is a bronze statue of Charles IV.

The city is properly deemed the court residence of these islands; and all those attached to the government, or who wish to be considered as of the higher circle, reside here; but foreigners are not permitted to do so. The houses in the city are generally of stone,
plastered, and white or yellow washed on the outside. They are only two stories high, and in consequence cover a large space, being built around a patio or courtyard.

The ground-floors are occupied as storehouses, stables, and for porters' lodges. The second story is devoted to the dining-halls and sleeping apartments, kitchens, bath-rooms, etc. The bed-rooms have the windows down to the floor, opening on wide balconies, with blinds or shutters. These blinds are constructed with sliding frames, having small squares of two inches filled in with a thin semitransparent shell, a species of Placuna; the fronts of some of the houses have a large number of these small lights, where the females of the family may enjoy themselves unperceived.

After entering the canal, we very soon found ourselves among a motley and strange population. On landing, the attention is drawn to the vast number of small stalls and shops with which the streets are lined on each side, and to the crowds of people passing to and fro, all intent upon their several occupations. The artisans in Manila are almost wholly Chinese; and all trades are local, so that in each quarter of the Binondo suburb the privilege of exclusive occupancy is claimed by some particular kinds of shops. In passing up the Escolta (which is the longest and main street in this district), the cabinet-makers, seen busily at work in their shops, are first met with; next to these come the tinkers and blacksmiths; then the shoemakers, clothiers, fishmongers, haberdashers, etc. These are flanked by outdoor occupations; and in each quarter are numerous cooks, frying cakes, stewing, etc., in movable kitchens; while here and there are to be seen betel-nut sellers, either moving about to obtain customers, or taking a stand in some great thoroughfare. The moving throng, composed of carriers, waiters, messengers, etc., pass quietly and without any noise: they are generally seen with the Chinese umbrella, painted in many colors, screening themselves from the sun. The whole population wear slippers, and move along with a slipshod gait.

The Chinese are apparently far more numerous than the Malays, and the two races differ as much in character as in appearance: one is all activity, while the other is disposed to avoid all exertion. They preserve their distinctive character throughout, mixing but very little with each other, and are removed as far as possible in their civilities; the former, from their industry and perseverance, have almost monopolized all the lucrative employments among the lower orders, excepting the selling of fish and betel-nut, and articles manufactured in the provinces.

On shore, we were kindly received by Mr. Moore, who at once made us feel at home. The change of feeling that takes place in a transfer from shipboard in a hot climate, after a long cruise, to spacious and airy apartments, surrounded by every luxury that kind attentions can give, can be scarcely imagined by those who have not experienced it.

As we needed some repairs and supplies, to attend to these was my first occupation. Among the former, we required a heavy piece
of blacksmith-work, to prepare which, we were obliged to send our armourers on shore. The only thing they could procure was a place for a forge; but coal, and every thing else, we had to supply from the ship. I mention these things to show that those in want of repairs must not calculate upon their being done at Manila with dispatch, if they can be accomplished at all.
City of Manila.
The city government of Manila was established June 24, 1571, and the title under which it is designated is, "The celebrated and forever loyal city of Manila." In 1595, the charter was confirmed by royal authority; and all the prerogatives possessed by other cities in the kingdom were conferred upon it in 1638 . The members of the city council, by authority of the king, were constituted a council of advisement with the governor and captain-general. The city magistrates were also placed in rank next the judges; and in 1686 the jurisdiction of the city was extended over a radius of five leagues. In 1818, the members of the council were increased and ordered to assume the title of "Excellency." Manila has been one of the most constantly loyal cities of the Spanish kingdom, and is, in consequence, considered to merit these additional royal favors to its inhabitants.

In 1834, the Royal Tribunal of Commerce was instituted, to. supersede the old consulate, which had been established since 1772, The Royal Tribunal of Commerce acts under the new commercial code, and possesses the same privileges of arbitration as the old consulate. It consists of a prior, two consuls, and four deputies, elected by the profession. The three first exercise consular jurisdiction, the other four superintend the encouragement of commerce. The "Junta de Comercio" (chamber of commerce) was formed in 1835. This junta consits of the Tribunal of Commerce, with four merchants, who are selected by the government, two of whom are removed annually. The prior of the Tribunal presides at the Junta, whose meetings are required to be held twice a month, or oftener if necessary, and upon days in which the Tribunal is not in session. The two courts being under the same influences, and having the same officers, little benefit is to be derived from their double action, and great complaints are made of the manner in which business is conducted in them.

Of all her foreign possessions, the Philippines have cost Spain the least blood and labor. The honor of their discovery belongs to Magellan whose name is associated with the straits at the southern extremity of the American continent, but which has no memorial in these islands. Now that the glory which he gained by being the first to penetrate from the Atlantic to the Pacific, has been in some measure obliterated by the disuse of those straits by navigators, it would seem due to his memory that some spot among these islands should be set apart to commemorate the name of him who made them known to Europe. This would be but common justice to the discoverer of a region which has been a source of so much honor and profit to the Spanish nation, who opened the vast expanse of the Pacific to the fleets of Europe, and who died fighting to secure the benefits of his enterprise to his king and country.

Magellan was killed at the island of Mactan, on April 26, 1521 ; and Duarte, the second in command, who succeeded him, imprudently accepting an invitation from the chief of Cebu to a feast, was, with twenty companions, massacred. Of all the Spaniards present, only one escaped. After these and various other misfortunes, only one vessel of the squadron, the Victoria, returned to Spain. Don Juan Sebastian del Cano, her commander, was complimented by his sovereign by a grant for his arms of a globe, with the proud inscription, commemorative of his being the first circumnavigator, "PRIMUS ME CIRCUMCEDIT."

Two years afterwards, a second expedition was fitted out, under the command of Loaisa, who died after they had passed through the Straits of Magellan, when they had been a year on their voyage. The command then fell upon Sebastian, who died in four days after his predecessor. Salazar succeeded to the command, and reached the Ladrone Islands, but shortly after leaving there he died also. They came in sight of Mindanao, but contrary winds obliged them to go to the Moluccas. When arrived at the Portuguese settlements, contentions and jealousies arose, and finally all the expedition was dispersed, and the fate of all but one of the vessels has become doubtful. None but the small tender returned, which, after encountering great difficulties, reached New Spain.

The third expedition was fitted out by Cortes, then viceroy of Mexico, and the command of it given to Saavedra. This sailed from the port of Silguattanjo, on the 31st of October, 1528, and stopped at the Ladrone Islands, of which it took possession for the crown of Spain. It afterwards went to Mindanao, and then pursued its voyage to Timor, where part of the expedition of Loaisa was found remaining. From Timor they made two attempts to return to New Spain, both of which failed. The climate soon brought on disease, which carried off a great number, and among them Saavedra. Thus the whole expedition was broken up, and the survivors found their way to the Portuguese settlements.

The fourth expedition was sent from New Spain, when under the government of Don Antonio de Mendoza, for the purpose of establishing a trade with the new islands, and it received orders not to visit the Moluccas. This expedition sailed in 1542, under the command of Villalobos. It reached the Philippine Islands without accident, and Villalobos gave them that name after Philip II, then prince of Asturias. Notwithstanding his positive instructions to the contrary, he was obliged to visit the Moluccas, and met the same treatment from the Portuguese that had been given to all whom they believed had any intention to interfere in their spice trade. The squadron touched at Amboina, where Villalobos died, an event which caused the breaking up of the expedition; and the few Spaniards that remained embarked in the Portuguese vessels to return home.

The fifth and last expedition was ordered by Philip II to be sent from Mexico, when under the government of Don Luis de Velasco, for the final conquest and settlement of the Philippines. With this expedition was sent Andres Urdaneta, a friar, whose reputation stood
very high as a cosmographer: he had belonged to the ill-fated expedition of Loaisa. This was the largest that had yet been fitted out for this purpose, numbering five vessels and about four hundred men. The command of it was intrusted to Legaspi, under whom it sailed from the port of Natividad, on November 21, 1564, and upon whom was conferred the title of governor and adelantado of the conquered lands, with the fillest powers. On the 13th of February, 1565, he arrived at the island of Tandaya, one of the Fhilippines: from thence he went to Leyte; there he obtained the son of a powerful chief as a guide, through whom he established peace with several of the native rulers, who thereafter aided the expedition w ith all the means in their power. At Bohol they built the first church. There he met and made peace with a chief of Luzon, with whom he went to that island. (Facts here are confused.-C.)

He now (April, 1565) took possession of all the island in the name of the crown of Spain, and became their first governor. In this conquest, motives different from those which governed them on the American continent, seemed to have influenced the Spaniards. Instead of carrying on a cruel war against the natives, they here pursued the policy of encouraging and fostering their industry. Whether they felt that this policy was necessary for the success of their undertaking, or were influenced by the religious fathers who were with them, is uncertain; but their measures seem to have been dictated by a desire to promote peace and secure the welfare of the inhabitants. There may be another cause for this course of action, namely, the absence of the precious metals, which held out no inducement to those thirsting for inordinate gain. This may have had its weight in exempting the expedition in its outset from the presence of those avaricious spirits which had accompanied other Spanish expeditions, and been the means of marking their progress with excessive tyranny, bloodshed, and violence. It is evident to one who visits the Philippines that some other power besides the sword has been at work in them; the natives are amalgamated with the Spaniards, and all seem disposed to cultivate the land and foster civilization. None of the feeling that grows out of conquest is to be observed in these islands; the two races are identified now in habits, manners, and religion, and their interests are so closely allied that they feel their mutual dependence upon each other.

The establishment of the new constitution in Spain in the year 1825 has had a wonderful effect upon these colonies, whose resources have within the last ten years been developed, and improvements pushed forward with a rapid step. Greater knowledge and more liberal views in the rulers are alone wanting to cause a still more rapid advance in the career of prosperity.

As our visit was to Luzon, we naturally obtained more personal information respecting it than the other islands. We learned that the northern peninsula* was composed of granite and recent volcanic rocks, together with secondary and tertiary deposits, while the southern peninsula is almost wholly volcanic.

[^194]The northern contains many valuable mines of gold, lead, copper, and iron, besides coal. A number of specimens of these, and the rocks which contain them, were presented to the Expedition by Señores Araria and Roxas of Manila.

So far as our information and observations went, the whole of the Philippine Islands are of similar geological formation. In some of the islands the volcanic rock prevails, while in others coal and the metalliferous deposits predominate. On some of them the coalbeds form part of the cliffs along the shore; on others, copper is found in a chlorite and talcose slate. The latter is more particularly the case with Luzon, and the same formation extends to Mindoro. Much iron occurs on the mountains. Thus among the (Upland) natives, who are yet unsubdued by the Spaniards, and who inhabit these mountains, it is found by them of so pure a quality that it is manufactured into swords and cleavers. These are, occasionally, obtained by the Spaniards in their excursions into the interior against these bands.
The country around Manila is composed of tufa of a light gray color, which being soft and easily worked, is employed as the common building material in the city. It contains, sometimes, scoria and pumice, in pieces of various sizes, besides, occasionally, impressions of plants, with petrified woods. These are confined to recent species, and include palms, etc.
This tufa forms one of the remarkable features of the volcanoes of the Philippine Islands, showing a strong contrast between them and those of the Pacific isles, which have ejected little else than lava and scoria.

Few portions of the globe seem to be so much the seat of internal fires, or to exhibit the effects of volcanic action so strongly as the Philippines. During our visit, it was not known that any of the volcanoes were in action; but many of them were smoking, particularly that in the district of Albay, called Isaroc. Its latest eruption was in the year 1839; but this did little damage compared with that of 1814, which covered several villages, and the country for a great distance around, with ashes. This mountain is situated to the southeast of Manila one hundred and fifty miles, and is said to be a perfect cone, with a crater at its apex.

It does not appear that the islands are much affected by earthquakes, although some have occasionally occurred that have done damage to the churches at Manila.

The coal which we have spoken of is deemed of value; it has a strong resemblance to the bituminous coal of our own country, possesses a bright lustre, and appears very free from all woody texture when fractured. It is found associated with sandstone, which contains many fossils. Lead and copper are reported as being very abundant; gypsum and limestone occur in some districts. From this, it will be seen that these islands have everything in the mineral way to constitute them desirable possessions.

With such mineral resources, and a soil capable of producing the most varied vegetation of the tropics, a liberal policy is all that the country lacks. The products of the Philippine Islands consist of sugar, coffee, hemp, indigo, rice, tortoise-shell, hides, ebony, saffron-
wood, sulphur, cotton, cordage, silk, pepper, cocoa, wax, and many other articles. In their agricultural operations the people are industrious, although much labor is lost by the use of defective implements. The plough, of very simple construction, has been adopted from the Chinese; it has no coulter, the share is flat, and being turned partly to one side, answers, in a certain degree, the purpose of a mould-board. This rude implement is sufficient for the rich soils, where the tillage depends chiefly upon the harrow, in constructing which a thorny species of bamboo is used. The harrow is formed of five or six pieces of this material, on which the thorns are left, firmly fastened together. It answers its purpose well, and is seldom out of order. A wrought-iron harrow, that was introduced by the Jesuits, is used for clearing the ground more effectually, and more particularly for the purpose of extirpating a troublesome grass, that is known by the name of cogon (a species of Andropogon), of which it is very difficult to rid the fields. The bolo or long-knife, a basket, and hoe, complete the list of implements, and answer all the purposes of our spades, etc.

The buffalo was used until within a few years exclusively in their agricultural operations, and they have lately taken to the use of the ox; but horses are never used. The buffalo, from the slowness of his motions, and his exceeding restlessness under the heat of the climate, is ill adapted to agricultural labor; but the natives are very partial to them, notwithstanding they occasion them much labor and trouble in bathing them during the great heat. This is absolutely necessary, or the animal becomes so fretful as to be unfit for use. If it were not for this, the buffalo would, notwithstanding his slow pace, be most effective in agricultural operations; he requires little food, and that of the coarsest kind; his strength surpasses that of the stoutest ox, and he is admirably adapted for the rice or paddy fields. They are very docile when used by the natives, and even children can manage them; but it is said they have a great antipathy to the whites, and all strangers. The usual mode of guiding them is by a small cord attached to the cartilage of the nose. The yoke rests on the neck before the shoulders, and is of simple construction. To this is attached whatever it may be necessary to draw, either by traces, shafts, or other fastenings. Frequently this animal may be seen with large bundles of bamboo lashed to them on each side. Buffaloes are to be met with on the lake with no more than their noses and eyes out of the water, and are not visible until they are approached within a few feet, when they cause alarm to the passengers by raising their large forms close to the boat. It is said that they resort to the lake to feed on a favorite grass that grows on its bottom in shallow water, and which they dive for. Their flesh is not eaten, except that of the young ones, for it is tough and tasteless. The milk is nutritious, and of a character between that of the goat and cow.

The general appearance of the buffalo is that of a hybrid of the bull and rhinoceros. Its horns do not rise upwards, are very close at the root, bent backwards, and of a triangular form, with a flat side above. One of the peculiarities of the buffalo is its voice, which is quite low, and in the minor key, resembling that of a young colt.

It is as fond of mire as swine, and shows the consequence of recent wallowing, in being crusted over with mud. The skin is visible, being but thinly covered with hair; its color is usually that of a mouse; in some individuals darker.

Rice is, perhaps, of their agricultural products, the article upon which the inhabitants of the Philippine Islands most depend for food and profit; of this they have several different varieties; which the natives distinguish by their size and the shape of the grain: the birnambang, lamuyo, malagequit, bontot-cabayo, dumali, quinanda, bolohan, and tangi: The three first are aquatic; the five latter upland varieties. They each have their peculiar uses. The dumali is the early variety; it ripens in three months from planting, from which circumstance it derives its name: it is raised exclusively on the uplands. Although much esteemed, it is not extensively cultivated, as the birds and insects destroy a large part of the crop.

The malagequit is very much prized, and used for making sweet and fancy dishes; it becomes exceedingly glutinous, for which reason it is used in making whitewash, which it is said to cause to become of a brilliant white, and to withstand the weather. This variety is not, however, believed to be wholesome. There is also a variety of this last species which is used as food for horses, and supposed to be a remedy and preventive against worms

The rice grounds or fields are laid out in squares, and surrounded by embankments, to retain the water of the rains or streams. After the rains have fallen in sufficient quantities to saturate the ground, a seed-bed is generally planted in one corner of the field, in which the rice is sown broadcast, about the month of June. The heavy rains take place in August, when the fields are ploughed, and are soon filled with water. The young plants are about this time taken from the seed-bed, their tops and roots trimmed, and then planted in the field by making holes in the ground with the fingers and placing four or five sprouts in each of them; in this tedious labor the poor women are employed, whilst the males are lounging in their houses or in the shade of the trees.

The harvest for the aquatic rice begins in December. It is reaped with small sickles, peculiar to the country, called yatap; to the back of these a small stick is fastened, by which they are held, and the stalk is forced upon it and cut. The spikes of rice are cut with this implement, one by one. In this operation, men, women, and children all take part.

The upland rice requires much more care and labor in its cultivation. The land must be ploughed three or four times, and all the turf and lumps well broken up by the harrow.

During its growth it requires to be weeded two or three times, to keep the weeds from choking the crop. The seed is sown broadcast in May. This kind of rice is harvested in November, and to collect the crop is still more tedious than in the other case, for it is always gathered earlier, and never reaped, in consequence of the grain not adhering to the ear. If it were gathered in any other way, the loss by transportation on the backs of buffaloes and horses, without any covering to the sheaf, would be so great as to dissipate a great portion of the crop.

It appears almost incredible that any people can remain in ignorance of a way of preventing so extravagant and wasteful a mode of harvesting. The government has been requested to prohibit it on account of the great expense it gives rise to; but whether any steps have ever been taken in the matter, I did not learn. It is said that not unfrequently a third part of the crop is lost, in consequence of the scarcity of laborers; while those who are disengaged will refuse to work, unless they receive one-third, and even onehalf of the crop, to be delivered free of expense at their houses. This the planters are often obliged to give, or lose the whole crop. Nay, unless the harvest is a good one, reapers are very unwilling to engage to take it even on these terms, and the entire crop is lost. The laborers, during the time of harvest, are supported by the planter, who is during that time exposed to great vexation, if not losses. The reapers are for the most part composed of the idle and vicious part of the population, who go abroad over the country to engage themselves in this employment, which affords a livelihood to the poorer classes; for the different periods at which the varieties of rice are planted and harvested, gives them work during a large portion of the year.

After the rice is harvested, there are different modes of treating it. Some of the proprietors take it home, where it is thrown into heaps, and left until it is desirable to separate it from the straw, when it is trodden out by men and women with their bare feet. For this operation, they usually receive another fifth of the rice.

Others stack it in a wet and green state, which subjects it to heat, from which cause the grain contracts a dark color, and an unpleasant taste and smell. The natives, however, impute these defects to the wetness of the season.

The crop of both the low and upland rice, is usually from thirty to fifty for one: this is on old land; but on that which is newly cleared or which has never been cultivated, the yield is far beyond this. In some soils of the latter description, it is said that for a chupa (seven cubic inches) planted, the yield has been a caban. The former is the two-hundred-and-eighth part of the latter. This is not the only advantage gained in planthing rich lands, but the saving of labor is equally great; for all that is required is to make a hole with the fingers, and place three or four grains in it. The upland rice requires but little water, and is never irrigated.

The cultivator in the Philippine Islands is always enabled to secure plenty of manure; for vegetation is so luxuriant that by pulling the weeds and laying them with earth, a good stock is quickly obtained with which to cover his fields. Thus, although the growth is so rank as to cause him labor, yet in this hot climate its decay is equally rapid, which tends to make his labors more successful.

The rice-stacks form a picturesque object on the field; they are generally placed around or near a growth of bamboo, whose tall, graceful, and feathery outline is of itself a beautiful object, but connected as it is often seen with the returns of the harvest, it furnishes an additional source of gratification.

The different kinds of rice, and especially the upland, would no doubt be an acquisition to our country. At the time we were at

Manila, it was not thought feasible to pack it, for it had just been reaped, and was so green that it would not have kept.* Although rice is a very prolific crop, yet it is subject to many casualties, from the locusts and other insects that devour it; the drought at other times affects it, particularly the aquatic varieties. There is a use to which the rice is applied here, which was new to us, namely, as a substitute for razors; by using two grains of it between the fingers, they nip the beard, or extract it from the chin and face.

Among the important productions of these islands, I have mentioned hemp, although the article called Manila hemp must not be understood to be derived from the plant which produces the common hemp (Cannabis), being obtained from a species of plantain (Musa textilis), called in the Philippines "abacá." This is a native of these islands, and was formerly believed to be found only on Mindanao; but this is not the case, for it is cultivated on the south part of Luzon, and all the islands south of it. It grows on high ground, in rich soil, and is propagated by seeds. It resembles the other plants of the tribe of plantains, but its fruit is much smaller, although edible. The fibre is derived from the stem, and the plant attains the height of fifteen or twenty feet. The usual mode of preparing the hemp is to cut off the stem near the ground, before the time or just when the fruit is ripe. The stem is then eight or ten feet long below the leaves, where it is again cut. The outer coating of the herbaceous stem is then stripped off, until the fibers or cellular parts are seen, when it undergoes the process of rotting, and after being well dried in houses and sheds, is prepared for market by assorting it, a task which is performed by the women and children. That which is intended for cloth is soaked for an hour or two in weak limewater prepared from sea-shells, again dried, and put up in bundles. From all the districts in which it grows, it is sent to Manila, which is the only port whence it can legally be exported. It arrives in large bundles, and is packed there, by means of a screw-press, in compact bales, for shipping, secured by rattan, each weighing two piculs.
The best Manila hemp ought to be white, dry, and of a long and fine fiber. This is known at Manila by the name of lupis; the second quality they call bandala.

The exportation has much increased within the last few years, in consequence of the demand for it in the United States; and the whole crop is now monopolized by the two American houses of Sturges \& Co., and T. N. Peale \& Co., of Manila, who buy all of good quality that comes to market. This is divided between the two houses, and the price they pay is from four to five dollars the picul. The entire quantity raised in 1840 was eighty-three thousand seven hundred and ninety piculs; in 1841, eighty-seven thousand.
The quantity exported to the United States in 1840, was sixtyeight thousand two hundred and eighty piculs, and in 1841, only sixty-two thousand seven hundred piculs; its value in Manila is about three hundred thousand dollars. Twenty thousand piculs go to Europe. There are no duties on its exportation.

[^195]That which is brought to the United States is principally manufactured in or near Boston, and is the cordage known as "white rope." The cordage manufactured at Manila is, however, very superior to the rope made with us, although the hemp is of the inferior kind. A large quantity is also manufactured into mats.

In the opinion of our botanist, it is not probable that the plant could be introduced with success into our country, for in the Philippines it is not found north of latitude $14^{\circ} \mathrm{N}$.

The coffee-plant is well adapted to these islands. A few plants were introduced into the gardens of Manila, about fifty years ago, since which time it has been spread all over the island, as is supposed by the civet-cats, which, after swallowing the seeds, cary them to a distance before they are voided.

The coffee of commerce is obtained here from the wild plant, and is of an excellent quality. Upwards of three thousand five hundred piculs are now exported, of which one-sixth goes to the United States.

The sugar-cane thrives well here. It is planted after the French fashion, by sticking the piece diagonally into the ground. Some, finding the cane has suffered in times of drought, have adopted other modes. It comes to perfection in a year, and they seldom have two crops from the same piece of land, unless the season is very favorable.

There are many kinds of cane cultivated, but that grown in the valley of Pampanga is thought to be the best. It is a small red variety, from four to five feet high, and not thicker than the thumb. The manufacture of the sugar is rudely conducted; and the whole business, I was told, was in the hands of a few capitalists, who, by making advances, secure the whole crop from those who are employed to bring it to market. It is generally brought in moulds, of the usual conical shape, called pilones, which are delivered to the purchaser from November to June, and contain each about one hundred and fifty pounds. On their receipt, they are placed in large storehouses, where the familiar operation of claying is performed. The estimate for the quantity of sugar from these pilones after this process is about one hundred pounds; it depends upon the care taken in the process.

Of cotton they raise a considerable quantity, which is of a fine quality, and principally of the yellow nankeen. In the province of Ilocos it is cultivated most extensively. The mode of cleaning it of its seed is very rude, by means of a hand-mill, and the expense of cleaning a picul (one hundred and forty pounds) is from five to seven dollars. There have, as far as I have understood, been no endeavors to introduce any cotton-gins from our country.

It will be merely necessary to give the prices at which laborers are paid, to show how low the compensation is, in comparison with those in our own country. In the vicinity of Manila, twelve and a half cents per day is the usual wages; this in the provinces falls to six and nine cents. A man with two buffaloes is paid about thirty cents. The amount of labor performed by the latter in a day would be the ploughing of a soane, about two-tenths of an acre. The most profitable way of employing laborers is by the task, when, it is said, the natives work well, and are industrious.

The manner in which the sugar and other produce is brought to market at Manila is peculiar, and deserves to be mentioned. In some of the villages, the chief men unite to build a vessel, generally a pirogue, in which they embark their produce, under the conduct of a few persons, who go to navigate it, and dispose of the cargo. In due time they make their voyage, and when the accounts are settled, the returns are distributed to each according to his share. Festivities are then held, the saints thanked for their kindness, and blessings invoked for another year. After this is over, the vessel is taken carefully to pieces, and distributed, among the owners, to be preserved for the next season.

The profits in the crops, according to estimates, vary from sixty to one hundred per cent.; but it was thought, as a general average, that this was, notwithstanding the great productiveness of the soil, far beyond the usual profits accruing from agricultural operations. In some provinces this estimate would hold good, and probably be exceeded.

Indigo would probably be a lucrative crop, for that raised here is said to be of quality equal to the best, and the crop is not subject to so many uncertainties as in India: the capital and attention required in vats, etc., prevent it from being raised in any quantities. Among the productions, the bamboo and rattan ought to claim a particular notice from their great utility; they enter into almost every thing. Of the former their houses are built, including frames, floors, sides, and roof; fences are made of the same material, as well as every article of general household use, including baskets for oil and water. The rattan is a general substitute for ropes of all descriptions, and the two combined are used in constructing rafts for crossing ferries.

I have thus given a general outline of the capabilities of this country for agricultural operations, in some of the most important articles of commerce; by which it will be seen that the Philippine Islands are one of the most favored parts of the globe.

The crops frequently suffer from the ravages of the locusts, which sweep all before them. Fortunately for the poorer classes, their attacks take place after the rice has been harvested; but the cane is sometimes entirely cut off. The authorities of Manila, in the vain hope of stopping their devastations, employ persons to gather them and throw them into the sea. I understood on one occasion they had spenteighty thousand dollars in this way, but all to little purpose. It is said that the crops rarely suffer from droughts, but on the contrary the rains are thought to fall too often, and to flood the rice fields; these, however, yield a novel crop, and are very advantageous to the poor, viz.: a great quantity of fish, which are called dalag, and are a species of Blunnius; they are so plentiful, that they are caught with baskets: these fish weigh from a half to two pounds, and some are said to be eighteen inches long; but this is not all; they are said, after a deep inundation, to be found even in the vaults of churches.

The Philippines are divided into thirty-one provinces, sixteen of which are on the island of Luzon, and the remainder comprise the other islands of the group and the Ladrones.

The population of the whole group is above three millions, including all tribes of natives, mestizos, and whites. The latternamed class are but few in number, not exceeding three thousand. The mestizos were supposed to be about fifteen or twenty thousand; they are distinguished as Spanish and Indian mestizos. The Chinese have of late years increased to a large number, and it is said that there are forty thousand of them in and around Manila alone. Onehalf of the whole population belongs to Luzon. The island next to it in the number of inhabitants is Panay, which contains about three hundred and thirty thousand. Then come Cebu, Mindanao, Leyte, Samar, and Negros, varying from the above numbers down to fifty thousand. The population is increasing, and it is thought that it doubles itself in seventy years. This rate of increase appears probable, from a comparison of the present population with the estimate made at the beginning of the present century, which shows a growth in the forty years of about one million four hundred thousand.

The native population is composed of a number of distinct tribes, the principal of which in Luzon are Pangasinan, Ilocos, Cagayan, Tagalog, and Pampangan.

The Igorots, who dwell in the mountains, are the only natives who have not been subjected by the Spaniards. The other tribes have become identified with their rulers in religion, and it is thought that by this circumstance alone has Spain been able to maintain the ascendency with so small a number, over such a numerous, intelligent, and energetic race as they are represented to be. This is, however, more easily accounted for, from the Spaniards fostering and keeping alive the jealousy and hatred that existed at the time of the discovery between the different tribes.

It seems almost incredible that Spain should have so long persisted in the policy of allowing no more than one galleon to pass annually between her colonies, and equally so that the nations of Europe should have been so long deceived in regard to the riches and wealth that Spain was monopolizing in the Philippines. The capture of Manila, in 1762, by the English, first gave a clear idea of the value of this remote and little-known appendage of the empire.

The Philippines, considered in their capacity for commerce, are certainly among the most favored portions of the globe, and there is but one circumstance that tends in the least degree to lessen their apparent advantage; this is the prevalence of typhoons in the China seas, which are occasionally felt with force to the north of latitude $10^{\circ} \mathrm{N}$. South of that parallel, they have never been known to prevail, and seldom so far; but from their unfailing occurrence yearly in some part of the China seas, they are looked for with more or less dread, and cause each season a temporary interruption in all the trade that passes along the coast of these islands.

The army is now composed entirely of native troops, who number about six thousand men, and the regiments are never suffered to serve in the provinces in which they are recruited, but those from the north are sent to the south, and vice versa. There they are employed to keep up a continual watch on each other; and, speaking different dialects, they never become identified.

They are, indeed, never allowed to remain long enough in one region, to imbibe any feelings in unison with those of its inhabitants. The hostility is so great among the regiments, that mutinies have occurred, and contests arisen which have produced even bloodshed, which it was entirely out of the power of the officers to prevent. In cases of this kind, summary punishment is resorted to.

Although the Spaniards, as far as is known abroad, live in peace and quiet, this is far from being the case; for rebellion and revolts among the troops and tribes are not unfrequent in the provinces. During the time of our visit one of these took place, but it was impossible to learn anything concerning it that could be relied upon, for all conversation respecting such occurrences is interdicted by the government. The difficulty to which I refer was said to have originated from the preaching of a fanatic priest, who inflamed them to such a degree that they overthrew the troops and became temporarily masters of the country. Prompt measures were immediately taken, and orders issued to give the rebels no quarter; the regiments most hostile to those engaged in the revolt were ordered to the spot; they spared no one; the priest and his companions were taken, put to death, and according to report, in a manner so cruel as to be a disgrace to the records of the nineteenth century. Although I should hope the accounts I heard of these transactions were incorrect, yet the detestation these acts were held in, would give some color to the statements.

The few gazettes that are published at Manila are entirely under the control of the government; and a resident of that city must make up his mind to remain in ignorance of the things that are passing around him, or believe just what the authorities will allow to be told, whether truth or falsehood. The government of the Philippines is emphatically an iron rule: how long it can continue so, is doubtful.

One of my first duties"was to make an official call upon His Excellency Don Marcelino Oroa, who is the sixty-first governor of the Philippine Islands. According to the established etiquette, Mr . Moore, the vice-consul, announced our desire to do so, and requested to be informed of the time when we would be received. This was accordingly named, and at the appointed hour we proceeded to the palace in the city proper. On our arrival, we were announced and led up a flight of steps, ample and spacious, but by no means of such splendor as would indicate the residence of vice-royalty. The suite of rooms into which we were ushered were so dark that it was difficult to see. I made out, however, that they were panelled, and by no means richly furnished. His excellency entered from a side-door, and led us through two or three apartments into his private audienceroom, an apartment not quite so dark as those we had come from: our being conducted to this, I was told afterwards, was to be considered an especial mark of respect to my country. His reception of us was friendly. The governor has much more the appearance of an Irishman than of a Spaniard, being tall, portly, of a florid complexion. He is apparently more than sixty years of age. He was dressed in a full suit of black, with a star on his breast.

Mr. Moore acted as interpreter, and the governor readily acceded to my request to be allowed to send a party into the interior for a few

Conditions not peaceful.

The governorgeneral.
days; a permission which I almost despaired of receiving, for I knew that he had refused a like application some few months before. The refusal, however, I think was in part owing to the character of the applicants, and the doubtful object they had in view. I impute the permission we received to the influence of our consul, together with Mr. Sturges, whose agreeable manners, conciliatory tone, and high standing with the authorities, will, I am satisfied, insure us at all times every reasonable advantage or facility.

The term of the governor in office is three years, and the present incumbent was installed in 1841. This length of time is thought to be sufficient for any one of them to make a fortune. The office is held by the appointment of the ministry in Spain, and with it are connected perquisites that are shared, it is said, by those who confer them.

After having paid our respects to his excellency, we drove to visit several other officers of the government, who received us without ceremony. We generally found them in loose morning-gowns, smoking, and cigars were invariably offered us; for this habit appears in Manila to extend to all ranks. Even in the public offices of the customhouse it was the fashion, and cigars, with a machero for striking a light, or a joss-stick kept burning, were usually seen in every apartment.

To the captain of the port, Don Juan Salomon, I feel under many obligations for his attentions. I was desirous of obtaining information relative to the Sulu Seas, and to learn how far the Spanish surveys had been carried. He gave me little hopes of obtaining any; but referred me to Captain Halcon, of the Spanish Navy, who had been employed surveying some part of the coast of the islands to the north. The latter whom I visited, on my making the inquiry of him, and stating the course I intended to pursue, frankly told me that all the existing charts were erroneous. He only knew enough of the ground to be certain that they were so, and consequently useless. He advised my taking one of the native pilots, who were generally well acquainted with the seas that lay more immediately in my route. The captain of the port was afterwards kind enough to offer to procure me one.

The intercourse I had with these gentlemen was a source of much gratification, and it gives me great pleasure to make this public expression of it. To both, my sincere acknowledgments are due for information in relation to the various reefs and shoals that have been recently discovered, and which will be found placed in their true position on our charts.

During our stay at Manila, our time was occupied in seeing sights, shopping, riding, and amusing ourselves with gazing on the throng incessantly passing through the Escolta of the Binondo suburb, or more properly, the commercial town of Manila.
Cigar factories.
Among the lions of the place, the great royal cigar manufactories claim especial notice from their extent and the many persons employed. There are two of these establishments, one situated in the Binondo quarter, and the other on the great square or Prado; in the former, which was visited by us, there are two buildings of two stories high, besides several storehouses, enclosed by a wall, with two
large gateways, at which sentinels are always posted. The principal workshop is in the second story, which is divided into six apartments, in which eight thousand females are employed. Throughout the whole extent, tables are arranged, about sixteen inches high, ten feet long, and three feet wide, at each of which fifteen women are seated, having small piles of tobacco before them. The tables are set crosswise from the wall, leaving a space in the middle of the room free. The labor of a female produces about two hundred cigars a day; and the working hours are from $6 \mathrm{a} . \mathrm{m}$. , till $6 \mathrm{p} . \mathrm{m}$. , with a recess of two hours, from eleven till one o'clock. The whole establishment is kept very neat and clean, and every thing appears to be carried on in the most systematic and workmanlike manner. Among such numbers, it has been found necessary to institute a search on their leaving the establishment to prevent embezzlement, and this is regularly made twice a day, without distinction of sex. It is a strange sight to witness the ingress and egress of these hordes of females; and probably the world cannot elsewhere exhibit so large a number of ugly women. Their ages vary from fifteen to fortyfive. The sum paid them for wages is very trifling. The whole number of persons employed in the manufactories is about fifteen thousand; this includes the officers, clerks, overseers, etc.

As nearly as I could ascertain, the revenue derived from these establishments is half a million of dollars.

The natives of the Philippines are industrious. They manufac- Piña. ture an amount of goods sufficient to supply their own wants, particularly from Panay and Ilocos. These for the most part consist of cotton and silks, and a peculiar article called piña. The latter is manufactured from a species of Bromelia (pineapple), and comes principally from the island of Panay. The finest kinds of piña are exceedingly beautiful, and surpass any other material in its evenness and beauty of texture. Its color is yellowish, and the embroidery is fully equal to the material. It is much sought after by all strangers, and considered as one of the curiosities of this group. Various reports have been stated of the mode of its manufacture, and among others that it was woven under water, which I found, upon inquiry, to be quite erroneous. The web of the piña is so fine, that they are obliged to prevent all currents of air from passing through the rooms where it is manufactured, for which purpose there are gauze screens in the windows. After the article is brought to Manila, it is then embroidered by girls; this last operation adds greatly to its value. We visited one of the houses where this was in progress, and where the most skilful workwomen are employed.

On mounting the stairs of bamboos, every step we took produced its creak; but, although the whole seemed but a crazy affair, yet it did not want for strength, being well and firmly bound together. There were two apartments, each about thirteen by twenty-five feet, which could be divided by screens, if required. At the end of it were seen about forty females, all busily plying their needles, and so closely seated as apparently to incommode each other. The mistress of the manufactory, who was quite young, gave us a friendly reception, and showed us the whole process of drawing the threads and working the patterns, which, in many cases, were elegant.

A great variety of dresses, scarfs, caps, collars, cuffs, and pockethandkerchiefs, were shown us. These were mostly in the rough state, and did not strike us with that degree of admiration which was expected. They, however, had been in hand for six months, and were soiled by much handling; but when others were shown us in the finished state, washed and put up, they were such as to claim our admiration.

I was soon attracted by a very different sight at the other end of the apartment. This was a dancing-master and his scholar, of six years old, the daughter of the woman of the house. It was exceedingly amusing to see the airs and graces of this child.

For music they had a guitar; and I never witnessed a ballet that gave me more amusement, or saw a dancer that evinced more grace, ease, confidence, and decided talent, than did this little girl. She was prettily formed, and was exceedingly admired and applauded by us all. Her mother considered her education as finished, and looked on with all the admiration and fondness of parental affection.

On inquiry, I found that the idea of teaching her to read and write had not yet been entertained. Yet every expense is incurred to teach them to use their feet and arms, and to assume the expression of countenance that will enable them to play a part in the afterscenes of life.

This manufactory had work engaged for nine months or a year in advance. The fabric is extremely expensive, and none but the wealthy can afford it. It is also much sought after by foreigners. Even orders for Queen Victoria and many of the English nobility were then in hand; at least I so heard at Manila. Those who are actually present have, notwithstanding, the privilege of selecting what they wish to purchase; for, with the inhabitants here, as elsewhere, ready money has too much attraction for them to forego the temptation.

Time in Manila seems to hang heavily on the hands of some of its inhabitants; their amusements are few, and the climate ill adapted to exertion. The gentlemen of the higher classes pass their morning in the transaction of a little public business, lounging about, smoking, etc. In the afternoon, they sleep, and ride on the Prado; and in the evening, visit their friends, or attend a tertulia. The ladies are to be pitied; for they pass three-fourths of their time in déshabillé, with their maids around them, sleeping, dressing, lolling, and combing their hair. In this way the whole morning is lounged away: they neither read, write, nor work. In dress they generally imitate the Europeans, except that they seldom wear stockings, and go with their arms bare. In the afternoon they ride on the Prado in state, and in the evening accompany their husbands. Chocolate is taken early in the morning, breakfast at eleven, and dinner and supper are included in one meal.

Mothers provide for the marriage of their daughters; and I was told that such a thing as a gentleman proposing to any one but the mother, or a young lady engaging herself, is unknown and unheard of. The negotiation is all carried forward by the mother, and the daughter is given to any suitor she may deem a desirable match. The young ladies are said to be equally disinclined to a choice them-
selves, and if proposals were made to them, the suitor would be at once referred to the mother. Among the lower orders it is no uncommon thing for the parties to be living without the ceremony of marriage, until they have a family and no odium whatever is attached to such a connexion. They are looked upon as man and wife, though they do not live together; and they rarely fail to solemnize their union when they have accumulated sufficient property to procure the requisite articles for housekeeping.

Three nights in each week they have music in the plaza, in front of the governor's palace, by the bands of four different regiments, who collect there after the evening parade. Most of the better class resort here, for the pleasure of enjoying it. We went thither to see the people as well as to hear the music. This is the great resort of the haut ton, who usually have their carriages in waiting, and promenade in groups backwards and forwards during the time the music is playing. This is by far the best opportunity that one can have for viewing the society of Manila, which seems as easy and unrestrained as the peculiar gravity and ceremonious mode of intercourse among the old Spaniards can admit. Before the present governor took office, it had been the custom to allow the bands to play on the Prado every fine evening, when all the inhabitants could enjoy it until a late hour; but he has interdicted this practice, and of course given much dissatisfaction; he is said to have done this in a fit of ill temper, and although importuned to restore this amusement to the common people, he pertinaciously refuses.

The bands of the regiments are under the direction of Frenchmen and Spaniards: the musicians are all natives, and play with a correct ear.

Our afternoons were spent in drives on the Prado, where all the fashion and rank of Manila are to be met, and where it is exceedingly agreeable to partake of the fresh and pure air after a heated day in the city. The extreme end of the Prado lies along the shore of the bay of Manila, having the roadstead and ships on one side, and the city proper with its fortifications and moats on the other. This drive usually lasts for an hour, and all sorts of vehicles are shown off, from the governor's coach and six, surrounded by his lancers, to the sorry chaise and limping nag. The carriage most used is a fourwheeled biloche, with a gig top, quite low, and drawn by two horses, on one of which is a postilion; these vehicles are exceedingly comfortable for two persons. The horses are small, but spirited, and are said to be able to undergo great fatigue, although their appearance does not promise it. This drive is enlivened by the music of the different regiments, who are at this time to be seen manoeuvering on the Prado. The soldiers have a very neat and clean appearance; great attention is paid to them, and the whole are well appointed. The force stationed in Manila is six thousand, and the army in the Philippines amounts to twenty thousand men. The officers are all Spaniards, generally the relations and friends of those in the administration of the government. The pay of the soldiers is four dollars a month, and a ration, which is equal to six cents a day. As troops I was told, they acquitted themselves well. The Prado is laid out
in many avenues, leading in various directions to the suburbs, and these are planted with wild almond trees, which afford a pleasant shade. It is well kept, and creditable to the city.

In passing the crowds of carriages very little display of female beauty is observed, and although well-dressed above, one cannot but revert to their wearing no stockings beneath.

On the Prado is a small theatre, but so inferior that the building scarce deserves the name: the acting was equally bad. This amusement meets with little encouragement in Manila and, I was told, was discountenanced by the Governor.

I had the pleasure during our stay of attending a tertulia in the city. The company was not a large one, comprising some thirty or forty ladies and about sixty gentlemen. It resembled those of the mother country. Dancing was introduced at an early hour, and continued till a few minutes before eleven o'clock, at which time the gates of the city are always shut. It was amusing to see the sudden breaking up of the party, most of the guests residing out of the city. The calling for carriages, shawls, hats, etc., produced for a few minutes great confusion, every one being desirous of getting off at the earliest moment possible, for fear of being too late. This regulation, by which the gates are closed at so early an hour, does not appear necessary, and only serves to interrupt the communication between the foreign and Spanish society as the former is obliged, as before observed, to live outside of the city proper. This want of free intercourse is to be regretted, as it prevents that kind of friendship by which many of their jealousies and prejudices might be removed.

The society at this tertulia was easy, and so far as the enjoyment of dancing went, pleasant; but there was no conversation. The refreshments consisted of a few dulces, lemonade, and strong drinks in an anteroom. The house appeared very spacious and well adapted for entertainments, but only one of the rooms was well lighted. From the novelty of the scene, and the attentions of the gentleman of the house, we passed a pleasant evening.

The natives and mestizos attracted much of my attention at Manila. Their dress is peculiar: over a pair of striped trousers of various colors, the men usually wear a fine grass-cloth shirt, a large straw hat, and around the head or neck a many colored silk handkerchief. They often wear slippers as well as shoes. The Chinese dress, as they have done for centuries, in loose white shirts and trousers. One peculiarity of the common men is their passion for cock-fighting; and they carry these fowls wherever they go, after a peculiar fashion under their arm.
Cock-fighting.
Cock-fighting is licensed by the government, and great care is taken in the breeding of game fowls, which are very large and heavy birds. They are armed with a curved double-edged gaff. The exhibitions are usually crowded with half-breeds or mestizos, who are generally more addicted to gambling than either the higher or lower classes of Spaniards. It would not be an unapt designation to call the middling class cock-fighters, for their whole lives seem to be taken up with the breeding and fighting of these birds. On the exit from a cockpit, I was much amused with the mode of giving the return check, which was done by a stamp on the naked arm, and
precludes the possibility of its transfer to another person. The dress of the lower order of females is somewhat civilized, yet it bore so strong a resemblance to that of the Polynesians as to recall the latter to our recollection. A long piece of colored cotton is wound round the body, like the pareu, and tucked in at the side: this covers the nether limbs; and a jacket fitting close to the body is worn, without a shirt. In some, this jacket is ornamented with work around the neck; it has no collar, and in many cases no sleeves, and over this a richly embroidered cape. The feet are covered with slippers, with wooden soles, which are kept on by the little toe, only four toes entering the slipper, and the little one being on the outside. The effect of both costumes is picturesque.

The market is a never failing place of amusement to a foreigner, for there a crowd of the common people is always to be seen, and their mode of conducting business may be observed. The canals here afford great facilities for bringing vegetables and produce to market in a fresh state. The vegetables are chiefly brought from the shores of the Laguna de Bay, through the river Pasig. The meat appeared inferior, and as in all Spanish places the art of butchering is not understood. The poultry, however, surpasses that of any other place I have seen, particularly in ducks, the breeding of which is pursued to a great extent. Establishments for breeding these birds are here carried on in a systematic manner, and are a great curiosity. They consist of many small enclosures, each about twenty feet by forty or fifty, made of bamboo, which are placed on the bank of the river, and partly covered with water. In one corner of the enclosure is a small house, where the eggs are hatched by artificial heat, produced by rice-chaff in a stateff of fermentation. It is not uncommon to see six or eight hundred ducklings all of the same age. There are several hundreds of these enclosures, and the number of ducks of all ages may be computed at millions. The manner in which they are schooled to take exercise, and to go in and out of the water, and to return to their house, almost exceeds belief. The keepers or tenders are of the Tagalog tribe, who live near the enclosures, and have them at all times under their eye. The old birds are not suffered to approach the young, and all of one age are kept together. They are fed upon rice and a small species of shell-fish that is found in the river and is peculiar to it. From the extent of these establishments we inferred that ducks were the favorite article of food at Manila, and the consumption of them must be immense. The markets are well supplied with chickens, pigeons, young partridges, which are brought in alive, and turkeys. Among strange articles that we saw for sale, were cakes of coagulated blood. The markets are well stocked with a variety of fish, taken both in the Laguna and bay of Manila, affording a supply of both the fresh and salt water species, and many smaller kinds that are dried and smoked. Vegetables are in great plenty, and consist of pumpkins, lettuce, onions, radishes, very long squashes, etc.; of fruits, they have melons, chicos, durians, marbolas, and oranges.

Fish are caught in weirs, by the hook, or in seines. The former Fish. are constructed of bamboo stakes, in the shallow water of the lake, at the point where it flows through the Pasig river. In the bay,
and at the mouth of the river, the fish are taken in nets, suspended by the four corners from hoops attached to a crane, by which they are lowered into the water. The fishing-boats are little better than rafts, and are called sarabaos.

The usual passage-boat is termed banca, and is made of a single trunk. These are very much used by the inhabitants. They have a sort of awning to protect the passenger from the rays of the sun; and being light are easily rowed about, although they are exceedingly uncomfortable to sit in, from the lowness of the seats, and liable to overset, if the weight is not placed near the bottom. The outrigger was very often dispensed with, owing to the impediment it offered to the navigation of their canals; these canals offer great facilities for the transportation of burdens; the banks of almost all of them are faced with granite. Where the streets cross them, there are substantial stone bridges, which are generally of no more than one arch, so as not to impede the navigation. The barges used for the transportation of produce resemble our canal-boats, and have sliding roofs to protect them from the rain.

Water, for the supply of vessels, is brought off in large earthen jars. It is obtained from the river, and if care is not taken, the water will be impure; it ought to be filled beyond the city. Our supply was obtained five or six miles up the river, by a lighter, in which were placed a number of water-casks. It proved excellent.

The trade of Manila extends to all parts of the world.
There are many facilities for the transaction of business, as far as the shipment of articles is concerned; but great difficulties attend the settling of disputed accounts, collecting debts, etc., in the way of which the laws passed in 1834 have thrown many obstacles. All commercial business of this kind goes before, first, the Junta de Comercio, and then an appeal to the Tribunal de Comercio. This appeal, however, is merely nominal; for the same judges preside in each, and they are said to be susceptible of influences that render an appeal to them by honest men at all times hazardous. The opinion of those who have had the misfortune to be obliged to recur to these tribunals is, that it is better to suffer wrong than encounter both the expense and vexation of a resort to them for justice. In the first of these courts the decision is long delayed, fees exacted, and other expenses incurred; and when judgment is at length given, it excites one party or the other to appeal: other expenses accrue in consequence, and the advocates and judges grow rich while both the litigants suffer. I understood that these tribunals were intended to simplify business, lessen the time of suits, and promote justice; but these results have not been obtained, and many believe that they have had the contrary effect, and have opened the road to further abuses.

The country around Manila, though no more than an extended plain for some miles, is one of great interest and beauty, and affords many agreeable rides on the roads to Santa Ana and Mariquina. Most of the country-seats are situated on the Pasig river; they may indeed be called palaces, from their extent and appearance. They are built upon a grand scale, and after the Italian style, with terraces, supported by strong abutments, decked with vases of plants.

The grounds are ornamented with the luxuriant, lofty, and graceful trees of the tropics; these are tolerably well kept. Here and there fine large stone churches, with their towers and steeples, are to be seen, the whole giving the impression of a wealthy nobility, and a happy and flourishing peasantry.

In one of our rides we made a visit to the Campo Santo or cemetery, about four miles from Manila. It is small, but has many handsome trees about it; among them was an Agati, full of large white flowers, showing most conspicuously. The whole place is as unlike a depository of the dead as it well can be. Its form is circular, having a small chapel, in the form of a rotunda, directly opposite the gate, or entrance. The walls are about twenty feet high, with three tiers of niches, in which the bodies are enclosed with quicklime. Here they are allowed to remain for three years, or until such time as the niches may be required for further use. Niches may be purchased, however, and permanently closed up; but in the whole cemetery there were but five thus secured. This would seem to indicate an indifference on the part of the living, for their departed relatives or friends; at least such was my impression at the time. The center of the enclosure is laid out as a flowergarden and shrubbery, and all the buildings are washed a deep buff-color, with white cornices; these colors, when contrasted with the green foliage, give an effect that is not unpleasing. In the chapel are two tombs, the one for the bishop, and the other for the governor. The former, I believe, is occupied, and will continue to be so, until another shall follow him; but the latter is empty, for, since the erection of the cemetery, none of the governors have died. In the rear of the chapel is another small cemetery, called Los Angeles; and, further behind, the Osero. The former is similar to the one in front, but smaller, and appropriated exclusively to children; the latter is an open space, where the bones of all those who have been removed from the niches, after three years, are cast out, and now lie in a confused heap, with portions of flesh and hair adhering to them. No person is allowed to be received here for interment, until the fees are first paid to the priest, however respectable the parties may be; and all those who pay the fees, and are of the true faith, can be interred. I was told of a corpse of a very respectable person being refused admittance, for the want of the priest's pass, to show that the claim had been satisied, and the coffin stopped in the road until it was obtained. We ourselves witnessed a similar refusal. A servant entered with a dead child; borne on a tray, which he presented to the sacristan to have interred, the latter asked him for the pass, which not being produced, he was dismissed, nor was he suffered to leave his burden until this requisite could be procured from the priest, who lived opposite. The price of interment was three dollars, but whether this included the purchase of the niche, or its rent for the three years only, I did not learn.

The churches of Manila can boast of several fine-toned bells, which are placed in large belfries or towers. There was one of these towers near the Messrs. Sturges', where we stayed; and the manner in which the bell was used, when swung around by the force
of two or three men, attracted our attention; for the ringers occasionally practised feats of agility by passing over with the bell, and landing on the coping on the opposite side. The tower being open, we could see the manœuver from the windows, and, as strangers, went there to look on. One day, whilst at dinner, they began to ring, and as many of the officers had not witnessed the fact, they sought the windows. This excited the vanity of those in the belfry, who redoubled their exertions, and performed the feat successfully many times, although in some instances they narrowly escaped accident, by landing just within the outside coping. This brought us all to the window, and the next turn, more force having been given to the bell, the individual who attempted the feat was thrown headlong beyond the tower, and dashed to pieces on the pavement beneath. Although shocked at the accident, I felt still more so when, after a few minutes, the bell was again heard making its usual sound, as if nothing had occurred to interrupt the course of its hourly peals.

In company with Dr. Tolben, I visited one of the convents where he attended on some of the monks who were sick; he seemed well acquainted with them all. I was much struck with the extent of the building, which was four stories high, with spacious corridors and galleries, the walls of which were furnished with pictures representing the martyrdom of the Dominican friars in Japan. These were about seventy in number, in the Chinese style of art, and evidently painted by some one of that nation, calling himself an artist. From appearances, however, I should think they were composed by the priests, who have not a little taxed their invention to find out the different modes in which a man can be put to death. Many evidently, if not all, had been invented for the pictures. So perplexed had they apparently been, that in one of the last it was observed that the executioner held his victim at arms' length by the heels, and was about to let him drop headforemost into a well. From the galleries we passed into the library, and thence into many of the rooms, and finally we mounted to the top of the monastery, which affords a beautiful view of the bay, city, and suburbs. There I was presented to three of the friars, who were pleasant and jolly-looking men. Upon the roof was a kind of observatory, or look-out, simply furnished with billiard-tables and shuffleboards, while the implements for various other games lay about on small tables, with telescopes on stands, and comfortable arm-chairs. It was a place where the friars put aside their religious and austere character or appearance, and sought amusement. It was a delightful spot, so far as coolness and the freshness of the sea air were concerned, and its aspect gave me an insight behind the curtain of these establishments that very soon disclosed many things I was ignorant of before. All the friars were of a rotund form, and many of them bore the marks of good living in their full, red, and bloated faces. It seems to be generally understood at Manila, that they live upon the fat of the land. We visited several of the rooms, and were warmly greeted by the padres, one of whom presented me with a meteorological table for the previous year.

The revenues of all these religious establishments are considerable; the one I visited belonged to the Dominicans, and was very rich. Their revenues are principally derived from lands owned by them, and the tithes from the different districts which they have under their charge, to which are added many alms and gifts. On inquiry, I found their general character was by no means thought well of, and they had of late years lost much of the influence that they possessed before the revolution in the mother country.

Among the inhabitants we saw here, was a native boy of the Igorots, or mountain tribe. He is said to be a true Negrito. (Another confusion of facts.-C.)

The Spaniards, as has been stated, have never been able to subdue this tribe, who are said to be still as wild as on their first landing; they are confined almost altogether to the plains within or near the mountains, and from time to time make inroads in great force on the outer settlements, carrying off as much plunder as possible. The burden of this often causes them to be overtaken by the troops. When overtaken, they fight desperately, and were it not for the fire-arms of their adversaries, would give them much trouble. Few are captured on such occasions, and it is exceedingly difficult to take them alive, unless when very young. These mountains furnish them with an iron ore almost pure, in manufacturing which they show much ingenuity. Some of their weapons were presented to the Expedition by Josiah Moore, Esq. These are probably imitations of the early Spanish weapons used against them. From all accounts, the natives are of Malay origin, and allied to those of the other islands of the extensive archipelago of the Eastern Seas; but the population of the towns and cities of the island are so mixed, from the constant intercourse with Chinese, Europeans, and others, that there is no pure blood among them. When at Manila, we obtained a grammar of the Tagalog language, which is said to be now rarely heard, and to have become nearly obsolete. This grammar is believed to be the only one extant, and was procured from a padre, who presented it to the Expedition. (Tagalog is here mistaken for a mountaineer's dialect.-C.)

The Pampangans are considered the finest tribe of natives; they are excessively fond of horse-racing, and bet very considerable sums upon it; they have the reputation of being an industrious and energetic set of men.

The mode of raising revenue by a poll-tax causes great discontent among all classes, for although light, it is, as it always has been elsewhere, unpopular. All the Chinese pay a capitation tax of four dollars. The revenue from various sources is said to amount to one million six hundred thousand dollars, of which the poll-tax amounts to more than one-half, the rest being derived from the customs, tobacco, etc. There is no tax upon land. It was thought at Manila that a revenue might be derived by indirect taxation, far exceeding this sum, without being sensibly felt by the inhabitants. This mode is employed in the eastern islands under the English and Dutch rule, and it is surprising that the Spaniards also do not adopt it, or some other method to increase resources that are so much needed. Whenever the ministry in Spain had to meet a claim,
they were a few years ago in the habit of issuing drafts on this colonial government in payment. These came at last in such numbers, that latterly they have been compelled to suspend the payment of them.

The revenue of the colonial government is very little more than will meet the expenses; and it is believed that, notwithstanding these unaccepted claims, it received orders to remit the surplus, if any, to Spain, regardless of honor or good faith.

The government of the Philippines is in the hands of a governorgeneral, who has the titles of viceroy, commander-in-chief, subdelegate, judge of the revenue from the post-office, commander of the troops, captain-general, and commander of the naval forces. His duties embrace every thing that relates to the security and defence of the country. As advisers, he has a council called the Audiencia.

The islands are divided into provinces, each of which has a military officer with the title of governor, appointed by the governor-general. They act as chief magistrates, have jurisdiction over all disputes of minor importance, have the command of the troops in time of war, and are collectors of the royal revenues, for the security of which they give bonds, which must be approved of by the comptrollergeneral of the treasury. The province of Cavite is alone exempt from this rule, and the collection of tribute is there confided to a police magistrate.

Each province is again sub-divided into pueblos, containing a greater or less number of inhabitants, each of which has again its ruler, called a gobernadorcillo, who has in like manner other officers under him to act as police magistrates. The number of the latter are very great, each of them having his appropriate duties. These consist in the supervision of the grain fields, coconut groves, betelnut plantations, and in the preservation of the general order and peace of the town. So numerous are these petty officers, that there is scarcely a family of any consequence, that has not a member who holds some kind of office under government. This policy, in case of disturbances, at once unites a large and influential body on the side of the government, that is maintained at little expense. The gobernadorcillo exercises the municipal authority, and is especially charged to aid the parish priest in every thing appertaining to religious observances, etc.

In the towns where the descendants of the Chinese are sufficiently numerous, they can, by permission of the governor, elect their own petty governors and officers from among themselves.

In each town there is also a headman (cabeza de barangay), who has the charge of fifty tributaries, in each of which is included as many families. This division is called a barangay. This office forms by far the most important part of the machinery of government in the Philippine Islands, for these headmen are the attorneys of these small districts, and become the electors of the gobernadorcillos, and other civil officers. Only twelve, however, of them or their substitutes, are allowed to vote in each town.

The office of head-man existed before the conquest of the island, and the Spaniards showed their wisdom in continuing and adapting
it to their system of police. The office among the natives was hereditary, but their conquerors made it also elective, and when a vacancy now occurs through want of heirs, or resignation, it is filled up by the superintendent of the province, on the recommendation of the gobernadorcillo and the headman. This is also the case when any new office is created. The privileges of the headmen are great; themselves, their wives, and their first-born children, are exempted from paying tribute to the crown, an exoneration which is owing to their being collectors of the royal revenues. Their duties consist in maintaining good order and harmony, in dividing the labor required for the public benefit equally, adjusting differences, and receiving the taxes.

The gobernadorcillo takes cognizance of all civil cases not exceeding two taels of gold, or forty-four dollars in silver; all criminal cases must be sent to the chief of the province. The headmen formerly served for no more than three years, and if this was done faithfully, they became and were designated as principals, in virtue of which rank they received the title of Don.

The election takes place at the court-house of the town; the electors are the gobernadorcillo whose cffice is about to expire, and twelve of the oldest headmen, cabezas de barangay, collectors of tribute for the gobernadorcillo they must select, by a plurality of votes, three individuals, who must be able to speak, read, and write the Spanish language. The voting is done by ballot, in the presence of the notary (escribano), and the chief of the province, who presides. The curate may be present, to look after the interest of the church but for no other purpose. After the votes are taken, they are sealed and transmitted to the governor-general, who selects one of the three candidates, and issues a commission. In the more distant provinces, the chief of the district has the authority to select the gobernadorcillo, and f.ll up the commission, a blank form of which, signed by the governor-general, is left with him for that purpose.

The headmen may be elected petty governors, and still retain their office, and collect the tribute or taxes; for it is not considered just, that the important office of chief of Barangay should deprive the holder of the honor of being elected gobernadorcillo.

The greater part of the Chinese reside in the province of Tondo, but the tribute is there collected by the alcalde mayor, with an assistant taken from among the officers of the royal treasury.

The poll-tax on the Chinese amounts to four dollars a head; it was formerly one-half more. Tax-lists of the Chinese are kept, in which they are registered and classified; and opposite the name is the amount at which the individual is assessed.

The Spanish government seems particularly desirous of giving consequence even to its lowest offices; and in order to secure it to them, it is directed that the chiefs of provinces, shall treat the gobernadorcillos with respect, offering them seats when they enter their houses or other places, and not allowing them to remain standing; furthermore, the parish curates are required to treat them with equal respect. So far as concerns the provinces, the government may be called, notwithstanding the officers, courts,
etc., monastic. The priests rule, and frequently administer punishment, with their own hands, to either sex, of which an instance will be cited hereafter.

As soon as we could procure the necessary passports, which were obligingly furnished by the governor to "Don Russel Sturges y quatro Anglo Americanos," our party left Manila for a short jaunt to the mountains. It was considered as a mark of great favor on the part of his excellency to grant this indulgence, particularly as he had a few months prior denied it to a party of French officers. I was told that he preferred to make it a domestic concern, by issuing the passport in the name of a resident, in order that compliance in this case might not give umbrage to the French. It was generally believed that the cause of the refusal in the former instance was the imprudent manner in which the French officers went about taking plans and sketches, at the corners of streets, etc., which in the minds of an unenlightened and ignorant colonial government, of course excited suspicion. Nothing can be so ridiculous as this system of passports; for if one was so disposed, a plan, and the most minute information of every thing that concerns the defences of places, can always be obtained at little cost now-a-days; for such is the skill of engineers, that a plan is easily made of places, merely by a sight of them. We were not, however, disposed to question the propriety of the governor's conduct in the former case, and I left abundantly obliged to him for a permission that would add to our stock of information.

It was deemed at first impossible for the party to divide, as they had but one passport, and some difflculties were anticipated from the number being double that stated in the passport. The party consisted of Messrs. Sturges, Pickering, Eld, Rich, Dana, and Brackenridge. Mr. Sturges, however, saw no difflculty in dividing the party after they had passed beyond the precincts of the city, taking the precaution, at the same time, not to appear together beyond the number designated on the paper.

On the 14th, they left Manila, and proceeded in carriages to Santa Ana, on the Pasig, in order to avoid the delay that would ensue if they followed the windings of the river in a banca, and against the current.

At Santa Ana they found their bancas waiting for them, and embarked. Here the scene was rendered animated by numerous boats of all descriptions, from the parao to the small canoe of a single log.

There is a large population that live wholly on the water: for the padrones of the parao have usually their families with them, which, from the great variety of ages and sexes, give a very different and much more bustling appearance to the crowd of boats, than would be the case if they only contained those who are employed to navigate them. At times the paraos and bancas, of all sizes, together with the saraboas and pativas (duck establishments), become jumbled together, and create a confusion and noise such as is seldom met with in any other country.

The pativas are under the care of the original inhabitants, to whom exclusively the superintendence of the ducklings seems to be com-
mitted. The pens are made of bamboo, and are not over a foot high. The birds were all in admirable order, and made no attempt to escape over the low barrier, although so light that it was thought by some of our gentlemen it would not have sufficed to confine American ducks, although their wings might have been cut. The mode of giving them exercise was by causing them to run round in a ring. The good understanding existing between the keepers and their charge was striking, particularly when the former were engaged in cleansing the pens, and assisting the current to carry off the impurities. In the course of their sail, it was estimated that hundreds of thousands of ducks of all ages were seen.

The women who were seen were usually engaged in fishing with a hook and line, and were generally standing in the water, or in canoes. The saraboas were here also in use. The run of the fish is generally concentrated by a chevaux-de-frise to guide them towards the nets and localities where the fishermen place themselves.

At five o'clock they reached the Laguna de Bay, where they took in a new crew, with mast and sail. This is called twenty-five miles from Manila by the river; the distance in a bird's flight is not over twelve. The whole distance is densely peopled, and well cultivated. The crops consist of indigo, rice, etc., with groves of the betel, palm, coconut, and quantities of fruit trees.

The shores of the lake are shelving, and afford good situations for placing fish-weirs, which are here established on an extensive scale. These weirs are formed of slips of bamboo, and are to be seen running in every direction to the distance of two or three miles. They may be said to invest entirely the shores of the lake for several miles from its outlet, and without a pilot it would be difficult to find the way through them. At night, when heron and tern were seen roosting on the top of each slat, these weirs presented rather a curious spectacle.

The Laguna de Bay is said to be about ten leagues in length by three in width, and trends in a north-northwest and south-southeast direction.

After dark, the bancas separated. Mr. Sturges, with Dr.Pickering and Mr. Eld, proceeded to visit the mountain of Maijaijai, while Messrs. Rich, Dana, and Brackenridge, went towards the Taal Volcano. The latter party took the passport, while the former relied upon certain letters of introduction for protection, in case of difficulty.

Mr. Sturges, with his party, directed his course to the east side of the lake, towards a point called Jalajala, which they reached about three o'clock in the morning, and stopped for the crew to cook some rice, etc. At 8 o'clock a. m., they reached Santa Cruz, situated about half a mile up a small streamlet, called Paxanau. At this place they found Don Escudero to whom they had a letter of introduction, and who holds a civil appointment. They were kindly received by this gentleman and his brown lady, with their interesting family. He at once ordered horses for them to proceed to the mission of Maijaijai, and entertained them with a sumptuous breakfast.

They were not prepared to set out before noon, until which time they strolled about the town of Santa Cruz, the inhabitants of which are Tagalogs. There are only two old Spaniards in the place. The province in which Santa Cruz is situated contains about five thousand inhabitants, of whom eighteen hundred pay tribute.

The people have the character of being orderly, and govern themselves without the aid of the military. The principal article of culture is the coconut tree, which is seen in large groves. The trunks of these were notched, as was supposed, for the purpose of climbing them. From the spathe a kind of spirit is manufactured, which is fully as strong as our whiskey.

About noon they left Don Escudero's, and took a road leading to the southward and eastward, through a luxuriant and beautiful country, well cultivated, and ornamented with lofty coconut trees, betel palms, and banana groves. Several beautiful valleys were passed, with streamlets rushing through them.

Maijaijai is situated about one thousand feet above the Laguna de Bay, but the rise is so gradual that it was almost imperceptible. The country has everywhere the appearance of being densely peopled; but no more than one village was passed between Santa Cruz and the mission. They had letters to F. Antonio Romana y Aranda, padre of the mission, who received them kindly, and entertained them most hospitably. When he was told of their intention to visit the mountain, he said it was impossible with such weather, pointing to the black clouds that then enveloped its summit; and he endeavoured to persuade the gentlemen to desist from what appeared to him a mad attempt; but finding them resolved to make the trial, he aided in making all the necessary preparations, though he had no belief in their success.

On the morning of the 27th, after mass, Mr. Eld and Dr. Pickering set out, but Mr. Sturges preferred to keep the good padre company until their return. The padre had provided them with guides, horses, twenty natives, and provisions for three days. He had been himself on the same laborious journey, some six months before, and knew its fatigues, although it turned out afterwards that his expedition was performed in fine weather, and that he had been borne on a litter by natives the whole way.

The first part of the road was wet and miry, and discouraging enough. The soil was exceedingly rich, producing tropical plants in great profusion, in the midst of which were seen the neat bamboo cottages, with their industrious and cleanly-looking inhabitants. When they reached the foot of the mountain, they found it was impossible to ride farther, and were obliged to take to walking, which was, however, less of a hardship than riding the little rats of horses, covered with mud and dirt, which were at first deemed useless; but the manner in which they ascended and maintained themselves on the slippery banks, surpassed anything they had before witnessed in horseflesh. The first part of the ascent of the mountain was gradual, but over a miry path, which was extremely slippery; and had it not been for the sticks stuck down by the
party of the padre in their former ascent, they would have found it extremely difficult to overcome; to make it more disagreeable, it rained all the time.

It took about two hours to reach the steep ascent. The last portion of their route had been through an uninhabited region, with some openings in the woods, affording pasture-grounds to a few small herds of buffalo. In three hours they reached the half-way house, by a very steep and regular ascent. Here the natives insisted upon stopping to cook their breakfast, as they had not yet partaken of anything through the day. The natives now endeavored to persuade them it was impracticable to go any farther, or at least to reach the top of the mountain and return before night. Our gentlemen lost their patience at the delay, and after an hour's endurance of it, resolved to set out alone. Six of the natives followed them, and by half-past three they reached the summit, where they found it cold and uncomfortable. The ascent had been difficult, and was principally accomplished by catching hold of shrubs and the roots of trees. The summit is comparatively bare, and not more than fifty feet in width. The side opposite to that by which they mounted was perpendicular, but owing to the thick fog they could not see the depth to which the precipice descended.

The observations with the barometers were speedily taken, which gave the height of Banajao as six thousand five hundred feet. The trees on the summit were twenty or thirty feet high, and a species of fir was very common. Gaultheria, attached to the trunks of trees, Rhododendrons, and Polygonums, also abounded. The rocks were so covered with soil that it was difficult to ascertain their character; Dr. Pickering is of opinion, however, that they are not volcanic. The house on the summit afforded them little or no shelter; being a mere shed, open on all sides, they found it untenantable, and determined to return as soon as their observations were finished, to the hali-way house, which they reached before dark.

The night was passed uncomfortably, and in the morning they made an early start down the mountain to reach the native village at its foot, where they were refreshed with a cup of chocolate, cakes, and some dulces, according to the custom of the country. At ten o'clock they reached the mission, where they were received by the padre and Mr. Sturges. The former was greatly astonished to hear that they had really been to the summit, and had accomplished in twenty-four hours what he had deemed a labor of three days. He quickly attended to their wants, the first among which was dry clothing; and as their baggage had unfortunately been left at Santa Cruz, the wardrobe of the rotund padre was placed at their disposal. Although the fit was rather uncouth on the spare forms of our gentlemen, yet his clothes served the purpose tolerably well, and were thankfully made use of. During their absence, Mr. Sturges had been much amused with the discipline he had witnessed at the hands of the church, which here seem to be the only visible ruling power. Two young natives had made complaint to the padre that a certain damsel had entered into vows or engagements to marry both; she was accordingly brought
up before the padre, Mr. Sturges being present. The padre first lectured her most seriously upon the enormity of her crime, then inflicted several blows on the palm of her outstretched hand, again renewing the lecture, and finally concluding with another whipping. The girl was pretty, and excited the interest of our friend, who looked on with much desire to interfere, and save the damsel from the corporal punishment, rendered more aggravated by the dispassionate and cool manner in which it and the lecture were administered. In the conversation which ensued, the padre said he had more cases of the violation of the marriage vow, and of infidelity, than any other class of crimes.

After a hearty breakfast, or rather dinner, and expressing their thanks to the padre, they rode back to Santa Cruz, where they arrived at an early hour, and at nine o'clock in the evening they embarked in their bancas for Manila.

In the morning they found themselves, after a comfortable night, at Los Baños. Here they took chocolate with the padre, to whom Mr. Sturges had a letter, who informed them that the other party had left the place the evening before for Manila.

This party had proceeded to the town of Baia, where they arrived at daylight on the 15th. Baia is quite a pretty place, and well situated; the houses are clean and comfortable, and it possessed a venerable stone church, with towers and bells. On inquiring for the padre, they found that he was absent, and it was in consequence impossible for them to procure horses to proced to the Volcano of Taal. They therefore concluded to walk to the hot springs at Los Baños, about five miles distant. Along the road they collected a number of curious plants. Rice is much cultivated, and fields of it extend to some distance on each side of the road. Buffaloes were seen feeding and wallowing in the ditches.

At Los Baños the hot springs are numerous, the water issuing from the rock over a considerable surface. The quantity of water discharged by them is large, and the whole is collected and conducted to the bathing-houses. The temperature of the water at the mouth of the culvert was $180^{\circ}$.

The old bath-house is a singular-looking place, being built on the hill-side, in the old Spanish style, with large balconies, that are enclosed in the manner already described, in speaking of the houses in Manila. It is beautifully situated, and overlooks the baths and lake. The baths are of stone, and consist of two large rooms, in each of which is a niche, through which the hot water passes. This building is now in ruins, the roof and floors having fallen in.

Los Baños is a small village, but contains a respectable-looking stone church, and two or three houses of the same material. Here the party found a difficulty in getting on, for the alcalde could not speak Spanish, and they were obliged to use an interpreter, in order to communicate with him. Notwithstanding this, he is a magistrate, whose duty it is to administer laws written in that language. Finding they could not succeed even here in procuring guides or horses,
they determined to remain and explore Mount Maquiling, the height of which is three thousand four hundred and fifty feet, and in the meantime to send for their bancas.

The next day they set out on their journey to that mountain, and the first part of their path lay over a gentle ascent, through cultivated grounds. Next succeeded an almost perpendicular hill, bare of trees, and overgrown with a tall grass, which it was difficult to pass through.

Such had been the time taken up, that the party found it impossible to reach the summit and return before dark. They therefore began to collect specimens; and after having obtained a full load, they returned late in the afternoon to Los Baños.

The mountain is composed of trachytic rocks and tufa, which are occasionally seen to break through the rich and deep soil, showing themselves here and there, in the deep valleys which former volcanic action has created, and which have destroyed the regular outline of the cone-shaped mountain. The tufa is generally found to form the gently-sloping plains that surround these mountains, and has in all probability been ejected from them. Small craters, of some two hundred feet in height, are scattered over the plains. The tufa is likewise exposed to view on the shores of the lake; but elsewhere, except on a few bare hills, it is entirely covered with the dense and luxuriant foliage. The tufa is generally of a soft character, crumbling in the fingers, and in it are found coarse and fine fragments of scoria, pumice, etc. The layers are from a few inches to five feet in thickness.

In the country around Los Baños, there are several volcanic hills, and on the sides of Mount Maquiling are appearances of parasitic cones, similar to those observed at the Hawaiian Islands; but time and the foliage have so disguised them, that it is difficult to determine exactly their true character.

I regretted exceedingly that the party that set out for the Lake of Taal was not able to reach it, as, from the accounts I had, it must be one of the most interesting portions of the country. It lies nearly south-west from Manila, and occupies an area of about one hundred and twenty square miles. The Volcano of Taal is situated on an island near the center of it, and is now in action. The cone which rises from its center is remarkably regular, and consists for the most part of cinders and scoria. It has been found to be nine hundred feet in elevation above the lake. The crater has a diameter of two miles, and its depth is equal to the elevation; the walls of the crater are nearly perpendicular, so much so that the descent cannot be made without the assistance of ropes. At the bottom there are two small cones. Much steam issues from the many fissures, accompanied by sulphurous acid gas. The waters of the lake are impregnated with sulphur, and there are said to be also large beds of sulphur. In the opinion of those who have visited this spot, the whole lake once formed an immense crater; and this does not appear very improbable, if we are to credit the accounts we received of the many craters on this island that are now filled with water; for instance, in the neighborhood of San Pablo there are said to be eight or nine.

The hot springs. The hot springs of Los Baños are numerous, and in their vicinity large quantities of steam are seen to issue from the shore of the lake. There are about a dozen which give out a copious supply of water. The principal one has been enclosed, and made to flow through a stone aqueduct, which discharges a considerable stream. The temperature of the water as it leaves the aqueduct is $178^{\circ}$. The villagers use it for cooking and washing; the signs of the former employment are evident enough from the quantities of feathers from the poultry that have been scalded and plucked preparatory to cooking. The baths are formed by a small circular building six feet in diameter, erected over the point of discharge for the purpose of securing a steam-bath; the temperature of these is $160^{\circ}$ and $140^{\circ}$. A change of temperature is said to have occurred in the latter.

The rocks in the vicinity are all tufa, and some of the springs break out close to the cold water of the lake. Near the aqueduct, a stone wall surrounds one of the principal outlets. Two-thirds of the area thus enclosed is occupied by a pond of warm water, and the other third is divided into two stone reservoirs, built for baths. These baths had at one time a high reputation, and were a very fashionable resort for the society of Manila; but their celebrity gradually diminished, and the whole premises have gone out of repair, and are fast falling to ruin.

The water of the springs has no perceptible taste, and only a very faint smell of sulphur is perceived. No gas escapes from it, but a white incrustation covers the stones over which the water flows.

Some of these waters were obtained, and since our return were put into the hands of Dr. C. T. Jackson, of Boston, who gives the following analysis:

Specific gravity, 1.0043; thermometer $60^{\circ}$; barometer 30.05 in .
A quantity of the water, equal in bulk to three thousand grains of distilled water, on evaporation gave-

Dry salts, 5.95 grains.
A quantity of the water, equal in bulk to one thousand grains of distilled water, was operated on for each of the following ingredients:

| Chlorine | . 0.66 |
| :---: | :---: |
| Carbonic acid. | 0.16 |
| Sulphuric acid | 0.03 |
| Soda and sodium | 0.97 |
| Magnesia. | 0.09 |
| Lime | . 0.07 |
| Potash. | traces |
| Organic matter |  |
| Manganese. |  |

1.98

On Mount Maquiling, wild buffaloes, hogs, a small species of deer, and monkeys are found. Birds are also very numerous, and among them is the horn-bill; the noise made by this bird resembles
a loud barking; report speaks of them as an excellent bird for the table. Our gentlemen reached their lodging-place as the night closed in, and the next day again embarked for Manila, regretting that time would not permit them to make another visit to so interesting a field of research. They found the lake so rough that they were compelled to return, and remain until eight o'clock. This, however, gave our botanists another opportunity of making collections, among which were beautiful specimens of Volkameria splendens, with elegant scarlet flowers, and a Brugmansia, which expanded its beautiful silvery flowers after sunset. On the shores a number of birds were feeding, including pelicans, with their huge bills, the diver, with its long arched neck, herons, gulls, eagles, and snow-white cranes, with ducks and other small aquatic flocks. Towards night these were joined by large bats, that were sene winging their way towards the plantations of fruit. These, with quantities of insects, gave a vivid idea of the wonderful myriads of animated things that are constantly brought into being in these tropical and luxuriant climates.

Sailing all night in a rough sea, they were much incommoded by the water, which was shipped into the banca and kept them constantly baling out; they reached the Pasig river at daylight, and again passed the duck establishments, and the numerous boats and bancas on their way to the markets of Manila.

Both the parties reached the consul's the same day, highly pleased with their respective jaunts. To the kindness of Messrs. Sturges and Moore, we are mainly indebted for the advantages and pleasures derived from the excursions.

The instruments were now embarked, and preparations made for going to sea. Our stay at Manila had added much to our collections; we obtained many new specimens, and the officers and naturalists had been constantly and profitably occupied in their various duties.

We went on board on January 20, and were accompanied to the vessel by Messrs. Sturges and Moore, with several other residents of Manila.

We had, through the kindness of Captain Salomon, procured a native pilot for the Sulu Sea, who was to act as interpreter.

On the morning of the 21st, we took leave of our friends, and got under way. The same day, and before we had cleared the bay, we spoke the American ship Angier, which had performed the voyage from the United States in one hundred and twenty-four days, and furnished us with late and interesting news. We then, with a strong northerly wind, made all sail to the south for the Straits of Mindoro.

SULU IN 1842
On the evening of January 21, the Vincennes, with the tender in company, left Manila bay. I then sent for Mr. Knox, who commanded the latter, and gave him directions to keep closely in company with the Vincennes, and at the same time pointed out
to him places of rendezvous where the vessels might again meet in case any unavoidable circumstance caused their separation. I was more particular in giving him instructions to avoid losing sight of the Vincennes, as I was aware that my proposed surveys might be impeded or frustrated altogether, were I deprived of the assistance of the vessel under his command.
Mindoro.
On the 22 nd, we passed the entrance of the Straits of San Bernardino. It would have been my most direct route to follow these straits until I had passed Mindoro, and it is I am satisfied the safest course, unless the winds are fair, for the direct passage. My object, however, was to examine the ground for the benefit of others, and the Apo Shoal, which lies about mid-channel between Palawan and Mindoro, claimed my first attention. The tender was despatched to survey it, while I proceeded in the Vincennes to examine the more immediate entrance to the Sulu Sea, off the southwest end of Mindoro.

Calavite Peak is the north point of Mindoro, and our observations made it two thousand feet high. This peak is of the shape of a dome, and appears remarkably regular when seen from its western side. On approaching Mindoro, we, as is usual, under high islands, lost the steady breeze, and the wind became light for the rest of the day. Mindoro is a beautiful island, and is evidently volcanic; it appears as if thrown up in confused masses; it is not much settled, as the more southern islands are preferred to it as a residence.

On the 23 rd, we ascertained the elevation of the highest peak of the island by triangulation to be three thousand one hundred and twenty-six fet. The easternmost island of the Palawan group, Busuanga, was at the time just in sight from the deck, to the southwest.

It had been my intention to anchor at Ambolou Island; but the wind died away before we reached it, and I determined to stand off and on all night.

On the 24th, I began to experience the truth of what Captain Halcon had asserted, namely, that the existing charts were entirely worthless, and I also found that my native pilot was of no more value than they were, he had evidently passed the place before; but whether the size of the vessel, so much greater than any he had sailed in, confused him, or whether it was from his inability to understand and to make himself understood by us, he was of no use whatever, and we had the misfortune of running into shoal water, barely escaping the bottom. These dangers were usually quickly passed, and we soon found ourselves again floating in thirty or forty fathoms water.

We continued beating to windward, in hopes of being joined by the Flying-fish, and I resolved to finish the survey towards the island of Semarara. We found every thing in a different position from that assigned it by any of the charts with which we were furnished. On this subject, however, I shall not dwell, but refer those who desire particular information to the charts and Hydrographical Memoir.

Towards evening, I again ran down to the southwest point of the island of Mindoro, and sent a letter on shore to the pueblo, with directions to have it put on board the tender, when she should arrive. We then began to beat round Semarara, in order to pass over towards Panay.

The southern part of Mindoro is much higher than the northern but appears to be equally rough. It is, however, susceptible of cultivation, and there are many villages along its shores.

Semarara is moderately high, and about fifteen miles in circumference; it is inhabited, and like Mindoro much wooded. According to the native pilot, its shores are free from shoals. It was not until the next day that we succeeded in reaching Panay. I determined to pass the night off Point Potol, the north end of Panay, as I believed the sea in its neighborhood to be free of shoals, and wished to resume our running survey early in the morning.

At daylight on the 27 th we continued the survey down the coast of Panay, and succeeded in correcting many errors in the existing charts (both English and Spanish). The channel along this side is from twelve to twenty miles wide, and suitable for beating in; little current is believed to exist; . and the tides, as far as our observations went, seem to be regular and of little strength.

The island of Panay is high and broken, particularly on the south end; its shores are thickly settled and well cultivated. Indigo and sugar-cane claim much of the attention of the inhabitants. The natives, are the principal cultivators. They pay to government a capitation tax of seven reals. Its population is estimated at three hundred thousand, which I think is rather short of the actual number.

On all the hills there are telegraphs of rude construction, to give information of the approach of piratical prahus from Sulu, which formerly were in the habit of making attacks upon the defenceless inhabitants and carrying them off into slavery. Of late years they have ceased these depredations, for the Spaniards have resorted to a new mode of warfare. Instead of pursuing and punishing the offenders, they now intercept all their supplies, both of necessaries and luxuries; and the fear of this has had the effect to deter pirates from their usual attacks.

We remained off San Pedro for the night, in hopes of falling in with the Flying-fish in the morning.

On the morning of the 28th, the Flying-fish was discovered plainly in sight. I immediately stood for her, fired a gun and made signal. At seven o'clock, another gun was fired, but the vessel still stood off, and was seen to make sail to the westward without paying any regard whatever to either, and being favored by a breeze while the Vincennes was becalmed, she stole off and was soon out of sight.*

After breakfast we opened the bay of Antique, on which is situated the town of San José. As this bay apparently offered anchorage

[^196]for vessels bound up this coast, I determined to survey it; and for this purpose the boats were hoisted out and prepared for surveying. Lieutenant Budd was despatched to visit the pueblo called San José.

On reaching the bay, the boats were sent to different points of it, and when they were in station, the ship fired guns to furnish bases by the sound, and angles were simultaneously measured. The boats made soundings on their return to the ship, and thus completed this duty, so that in an hour or two afterwards the bay was correctly represented on paper. It offers no more than a temporary anchorage for vessels, and unless the shore is closely approached, the water is almost too deep for the purpose.
San Jose.
At San José a Spanish governor resides, who presides over the two pueblos of San Pedro and San José, and does the duty also of alcalde. Lieutenant Budd did not see him, as he was absent, but his lady did the honors. Lieutenant Budd represented the pueblo as cleanly and orderly. About fifteen soldiers were seen, who compose the governor's guard, and more were said to be stationed at San Pedro. A small fort of eight guns commands the roadstead. The beach was found to be of fine volcanic sand, composed chiefly of oxide of iron, and comminuted shells; there is here also a narrow shore reef of coral. The plain bordering the sea is covered with a dense growth of coconut trees. In the fine season the bay is secure, but we were informed that in westerly and southwesterly gales heavy seas set in, and vessels are not able to lie at anchor. Several small vessels were lying in a small river about one and a half miles to the southward of the point on which the fort is situated. The entrance to this river is very narrow and tortuous.

Panay is one of the largest islands of the group. We had an opportunity of measuring the height of some of its western peaks or highlands, none of which exceed three thousand feet. The interior and eastern side have many lofty summits, which are said to reach an altitude of seven thousand five hundred feet; but these, as we passed, were enveloped in clouds, or shut out from view by the nearer highlands. The general features of the island are like those of Luzon and Mindoro. The few specimens we obtained of its rocks consisted of the different varieties of talcose formation, with quartz and jasper. The specimens were of no great value, as they were much worn by lying on the beach.

The higher land was bare of trees, and had it not been for the numerous fertile valleys lying between the sharp and rugged spurs, it would have had a sterile appearance.

The bay of Antique is in latitude $10^{\circ} 40^{\prime} \mathrm{N}$., longitude $121^{\circ} 59^{\prime}$ $30^{\prime \prime} \mathrm{E}$.

It was my intention to remain for two or three days at a convenient. anchorage to enable us to make short excursions into the interior; but the vexatious mismanagement of the tender now made it incumbent that I should make every possible use of the time to complete the operations connected with the hydrography of this sea; for I perceived that the duties which I intended should be performed ty her, would now devolve upon the boats, and necessarily expcse both cfficers and men to the hazard of contracting
disease. I regretted giving up this design, not only on my own account and that of the Expedition, but because of the gratification it would have afforded personally to the naturalists.

The town of San José has about thirty bamboo houses, some of which are filled in with clay or mortar, and plastered over, both inside and out. Few of them are more than a single story in height. That of the governor is of the same material, and overtops the rest; it is whitewashed, and has a neat and cleanly appearance. In the vicinity of the town are several beautiful valleys, which run into the mountains from the plain that borders the bay. The landing is on a bamboo bridge, which has been erected over an extensive mud-flat, that is exposed at low water, and prevents any nearer approach of boats. This bridge is about seven hundred feet in length; and a novel plan has been adopted to preserve it from being carried away. The stems of bamboo not being sufficiently large and heavy to maintain the superstructure in the soft mud, a scaffold is constructed just under the top, which is loaded with blocks of large stone, and the outer piles are secured to anchors or rocks, with grass rope. The roadway or top is ten feet wide, covered with split bamboo, woven together, and has rails on each side, to assist the passenger. This is absolutely necessary for safety; and even with this aid, one unaccustomed to it must be possessed of no little bodily strength to pass over this smooth, slippery, and springy bridge, without accident.

Two pirogues were at anchor in the bay, and on the shore was the frame of a vessel which had evidently been a long while on the stocks, for the weeds and bushes near the keel were six or eight feet high, and a portion of the timbers were decayed. Carts and sleds drawn by buffaloes were in use, and everything gave it the appearance of a thriving village. Although I have mentioned the presence of soldiers, it was observed on landing that no guard was stationed about or even at the fort; but shortly afterwards a soldier was seen hurrying towards the latter, in the act of dressing himself in his regimentals, and another running by his side, with his cartridgebox and musket. In a little while one was passing up and down on his post, as though he was as permanent there as the fort itself.

After completing these duties, the light airs detained us the remainder of the day under Panay, in sight of the bay. On the 29th, at noon, we had been wafted by it far enough in the offing to obtain the easterly breeze, which soon became strong, with an overcast sky, and carried us rapidly on our course; my time would not permit my heaving-to. We kept on our course for Mindanao during the whole night, and were constantly engaged in sounding, with our patent lead, with from thirty to forty fathoms cast, to prevent our passing over this part of the sea entirely unexamined.

At daylight on the 31st, we had the island of Mindanao before us, but did not reach its western cape until $5 \mathrm{p} . \mathrm{m}$. This island is high and broken, like those to the north of it, but, unlike them, its mountains are covered with forests to their very tops, and there were no distinct cones of minor dimensions, as we had observed on the others. If they do exist, they were hidden by the dense forest.

I had determined to anchor at Caldera, a small port on the south-west side of Mindanao, about ten miles distant from Zamboanga, where the governor resides. The latter is a considerable place, but the anchorage in its roadstead is said to be bad, and the currents that run through the Straits of Basilan are represented to be strong. Caldera, on the other hand, has a good, though small anchorage, which is free from the currents of the straits. It is therefore an excellent stopping-place, in case of the tide proving unfavorable. On one of its points stands a small fort, which, on our arrival, hoisted Spanish colors.

At six o'clock we came to anchor at Caldera, in seven fathoms water. There were few indications of inhabitants, except at and near the fort. An officer was despatched to the fort, to report the ship. It was found to be occupied by a few soldiers under the command of a lieutenant.
Caldera fort.
The fort is about seventy feet square, and is built of large blocks of red coral, which evidently have not been taken from the vicinity of the place, as was stated by the officers of the fort; for although our parties wandered along the alluvial beach for two or three miles in each direction, no signs of coral were observed. Many fragments of red, gray, and purple basalt and porphyry were met with along the beach; talcose rock and slate, syenite, hornblend, quartz, both compact and slaty, with chalcedony, were found in pieces and large pebbles. Those who were engaged in dredging reported the bottom as being of coral, in from four to six or eight fathoms; but this was of a different kind from that of which the fort was constructed.

The fort was built in the year 1784, principally for protection against the Sulu pirates, who were in the habit of visiting the settlements, and carrying off the inhabitants as slaves, to obtain ransom for them. This, and others of the same description, were therefore constructed as places of refuge for the inhabitants, as well as to afford protection to vessels.

Depredations are still committed, which render it necessary to keep up a small force. One or two huts which were seen in the neighborhood of the bay, are built on posts twenty feet from the ground, and into them they ascend by ladders, which are hauled up after the occupants have entered.

These, it is said, are the sleeping-huts, and are so built for the purpose of preventing surprise at night. Before our arriva :we had heard that the villages were all so constructed, but a visit to one soon showed that this was untrue. The natives seen at the village were thought to be of a decidedly lighter color and a somewhat different expression from the Malays. They were found to be very civil, and more polished in manners than our gentlemen expected: On asking for a drink of water, it was brought in a glass tumbler on a china plate. An old woman, to whom they had presented some trifles, took the trouble to meet them in another path on their return, and insisted on their accepting a basket of potatoes. Some of the houses contained several families, and many of them had no other means of entrance than a notched post stuck up to the door.

The forests of Mindanao contain a great variety of trees, some of which are of large size, rising to the height of one hundred and and one hundred and fifty feet. Some of their trunks are shaped like buttresses, similar to those before spoken of at Manila, from which they obtain broad slabs for the tops of tables. The trunks were observed to shoot up remarkably straight. Our botanical gentlemen, though pleased with the excursion, were disappointed at not being able to procure specimens from the lofty trees; and the day was less productive in this respect than they had anticipated. Large woody vines were common, which enveloped the trunks of trees in their folds, and ascending to their tops, prevented the - collection of the most desirable specimens.

The paths leading to the interior were narrow and much obstructed; one fine stream was crossed. Many buffaloes were observed wallowing in the mire, and the woods swarmed with monkeys and numbers of birds, among them the horn-bills; these kept up a continued chatter, and made a variety of loud noises. The forests here are entirely different from any we had seen elsewhere; and the stories of their being the abode of large boas and poisonous snakes, make the effect still greater on those who visit them for the first time. Our parties, however, saw nothing of these reptiles, nor anything to warrant a belief that such exist. Yet the officer at the fort related to me many snake stories that seemed to have some foundation; and by inquiries made elsewhere, I learned that they were at least warranted by some facts, though probably not to the extent that he represented.
Traces of deer and wild hogs were seen, and many birds were obtained, as well as land and sea shells. Among the latter was the Malleus vulgaris, which is used as food by the natives. The soil on this part of the island is a stiff clay, and the plants it produces are mostly woody; those of an herbaceous character were scarce, and only a few orchideous epiphytes and ferns were seen. Around the dwellings in the villages were a variety of vegetables and fruits, consisting of sugar-cane, sweet-potato, gourds, pumpkins, peppers, rice, water and musk melons, all fine and of large size.

The officer at the fort was a lieutenant of infantry; one of that rank is stationed here for a month, after which he, with the garrison, consisting of three soldiers, are relieved, from Zamboanga, where the Spaniards have three companies.

Zamboanga is a convict settlement, to which the native rogues, Zamboanga. principally thieves, are sent. The Spanish criminals, as I have before stated in speaking of Manila, are sent to Spain.

The inhabitants of the island of Mindanao, who are under the subjection of Spain, are about ten thousand in number, of whom five or six thousand are at or in the neighborhood of Zamboanga. The original inhabitants, who dwell in the mountains and on the east coast, are said to be quite black, and are represented to be a very cruel and bad set; they have hitherto bid defiance to all attempts to subjugate them. When the Spaniards make excursions into the interior, which is seldom, they always go in large parties on account of the wild beasts, serpents, and hostile natives; nevertheless, the latter frequently attack and drive them back.

The little fort is considered as a sufficient protection for the fishermen and small vessels against the pirates, who inhabit the island of Basilan, which is in sight from Mindanao, and forms the southern side of the straits of the same name. It is said that about seven hundred inhabit it. The name of Moro is given by the Spaniards to all those who profess the Mohammedan religion, and by such all the islands to the west of Mindanao, and known under the name of the Sulu archipelago, are inhabited.

The day we spent at Caldera was employed in surveying the bay, and in obtaining observations for its geographical position, and for magnetism. The flood tide sets to the northward and westward, through the straits, and the ebb to the eastward. In the bay we found it to run two miles an hour by the log, but it must be much more rapid in the straits.

At daylight on February 1st, we got under way to stand over for the Sangboys, a small island with two sharp hills on it. One and a half miles from the bay we passed over a bank, the least water on which was ten fathoms on a sandy bottom, and on which a vessel might anchor. The wind shortly after failed us, and we drifted with the tide for some hours, in full view of the island of Mindanao, which is bold and picturesque. We had thus a good opportunity of measuring some of its mountain ranges, which we made about three thousand feet high.
In the afternoon, a light breeze came from the southwest, and before sunset I found that we were again on soundings. As soon as we had a cast of twenty fathoms, I anchored for the night, judging it much better than to be drifting about without any knowledge of the locality and currents to which we were subjected.

On the morning of the 2nd, we got under way to proceed to the westward. As the bottom was unequal, I determined to pass through the broadest channel, although it had the appearance of being the shoalest, and sent two boats ahead to sound. In this way we passed through, continuing our surveying operations, and at the same time made an attempt to dredge; but the ground was too uneven for the latter purpose, and little of value was obtained.

Shortly after passing the Sangboys, we had the island of Sulu in sight, for which I now steered direct. At sunset we found ourselves within five or six miles of Soung Harbor; but there was not sufficient light to risk the dangers that might be in our course, nor wind enough to command the ship; and having no bottom where we were, I determined again to run out to sea, and anchor on the first bank I should meet. At half-past eight o'clock, we struck sounding in twenty-six fathoms, and anchored.

At daylight we determined our position by angles, and found it to correspond with part of the route we had passed over the day before, and that we were about fifteen miles from the large island of Sulu. Weighing anchor, we were shortly wafted by the westerly tide and a light air towards that beautiful island, which lay in the midst of its little archipelago; and as we were brought nearer and nearer, we came to the conclusion that in our many wanderings we had seen nothing to be compared to this enchanting spot. It appeared to be well cultivated, with gentle slopes rising here and
there into eminences from one to two thousand feet high. One or two of these might be dignified with the name of mountains, and were sufficiently high to arrest the passing clouds; on the afternoon of our arrival we had a singular example in the dissipation of a thunderstorm.

Although much of the island was under cultivation, yet it had all the freshness of a forest region. The many smokes on the hills, buildings of large size, cottages, and cultivated spots, together with the moving crowds on the land, the prahus, canoes, and fishingboats on the water gave the whole a civilized appearance. Our own vessel lay, almost without a ripple at her side, on the glassy surface of the sea, carried onwards to our destined anchorage by the flowing tide, and scarce a sound was heard except the splashing of the lead as it sought the bottom. The effect of this was destroyed in part by the knowledge that this beautiful archipelago was the abode of a cruel and barbarous race of pirates. Towards sunset we had nearly reached the bay of Soung, when we were met by the opposing tide, which frustrated all our endeavors to reach it, and I was compelled to anchor, lest we should again be swept to sea.

As soon as the night set in, fishermen's lights were seen moving along the beach in all directions, and gliding about in canoes, while the sea was filled with myriads of phosphorescent animalcula. After watching this scene for two or three hours in the calm and still night, a storm that had been gathering reached us; but it lasted only for a short time, and cleared off after a shower, which gave the air a freshness that was delightful after the sultry heat we had experienced during the day.

The canoes of this archipelago were found to be different from any that we had heretofore seen, not only in shape, but in making use of a double outrigger, which consequently must give them additional security. The paddle also is of a different shape, and has a blade at each end, which are used alternately, thus enabling a single person to manage them with ease. These canoes are made of a single log, though some are built upon. They seldom carry more than two persons. The figure on the opposite page will give a correct idea of one of them.

We saw the fishermen engaged in trolling and using the line; but the manner of taking fish which has been heretofore described is chiefly practised. In fishing, as well as in all their other employments, the kris and spear were invariably by their side.

The next morning at eight o'clock we got under way, and were towed by our boats into the bay of Soung, where we anchored off the town in nine fathoms water. While in the act of doing so, and after our intentions had become too evident to admit of a doubt, the Sultan graciously sent off a message giving us permission to enter his port.

Lieutenant Budd was immediately despatched with the interpreter to call upon the Datu Mulu or governor, and to learn at what hour we could see the Sultan. When the officer reached the town, all were found asleep; and after remaining four hours waiting, the only answer he could get out of the Datu Mulu was, that he supposed that the Sultan would be awake at three o'clock, when he thought I could see him.

During this time the boats had been prepared for surveying; and after landing the naturalists, they began the work.

At the appointed time, Captain Hudson and myself went on shore to wait upon the Sultan. On our approach to the town, we found that a great proportion of it was built over the water on piles, and only connected with the shore by narrow bridges of bamboo. The style of building in Sulu does not differ materially from that of the Malays. The houses are rather larger, and they surpass the others in filth.
Pirate craft.
We passed for some distance between the bridges to the landing, and on our way saw several piratical prahus apparently laid up. Twenty of these were counted, of about thirty tons burden, evidently built for sea-vessels, and capable of mounting one or two long guns. We landed at a small streamlet, and walked a short distance to the Datu's house, which is of large dimensions and rudely built on piles, which raise it about six feet above the ground, and into which we were invited. The house of the Datu contains one room, part of which is screened off to form the apartment of his wife. Nearly in the center is a raised dais, eight or ten feet square, under which are stowed all his valuables, packed in chests and Chinese trunks. Upon this dais are placed mats for sleeping, with cushions, pillows, etc.; and over it is a sort of canopy, hung around with fine chintz or muslin.

The dais was occupied by the Datu, who is, next to the Sultan, the greatest man of this island. He at once came from it to receive us, and had chairs provided for us near his sanctum. After we were seated, he again retired to his lounge. The Datu is small in person, and emaciated in form, but has a quick eye and an intelligent countenance. He lives, as he told me, with all his goods around him, and they formed a collection such as I could scarcely imagine it possible to bring together in such a place. The interior put me in mind of a barn inhabited by a company of strolling players. On one side were hung up a collection of various kinds of gay dresses, here drums and gongs, there swords, lanterns, spears, muskets, and small cannon; on another side were shields, buckler, masks, saws, and wheels, with belts, bands, and long robes. The whole was a strange mixture of tragedy and farce; and the group of natives were not far removed in appearance from the supernumeraries that a Turkish tragedy might have brought together in the green-room of a theatre. A set of more cowardly-looking miscreants I never saw. They appeared ready either to trade with us, pick our pockets, or cut our throats, as an opportunity might offer.

The wife's apartment was not remarkable for its comforts, although the Datu spoke of it with much consideration, and evidently held his better half in high estimation. He was also proud of his six children, the youngest of whom he brought out in its nurse's arms, and exhibited with much pride and satisfaction. He particularly drew my attention to its little highly-wrought and splendidlymounted kris, which was stuck through its girdle, as an emblem of his rank. He was in reality a fine-looking child. The kitchen was behind the house, and occupied but a small space, for they have little in the way of food that requires much preparation. The house of the Datu might justly be termed nasty.

We now learned the reason why the Sultan could not be seen; it was Friday, the Mahomedan Sabbath, and he had been at the mosque from an early hour. Lieutenant Budd had been detained, because it was not known when he would finish his prayers; and the ceremonies of the day were more important than usual, on account of its peculiar sanctity in their calendar.

Word had been sent off to the ship that the Sultan was ready to receive me, but the messenger passed us while on our way to the

[^197] Sultan. shore. After we had been seated for a while, the Datu asked if we were ready to accompany him to see the Sultan; but intimated that no one but Captain Hudson and myself could be permitted to lay eyes on him. Being informed that we were, he at once, and in our presence, slipped on his silken trousers, and a new jacket, covered with bell-buttons; put on his slippers, strapped himself round with a long silken net sash, into which he stuck his kris, and, with umbrella in hand, said he was ready. He now led the way out of his house, leaving the motley group behind, and we took the path to the interior of the town, towards the Sultan's. The Datu and I walked hand in hand, on a roadway about ten feet wide, with a small stream running on each side. Captain Hudson and the interpreter came next, and a guard of six trusty slaves brought up the rear.

When we reached the outskirts of the town, about half a mile from the Datu's, we came to the Sultan's residence, where he was prepared to receive us in state. His house is constructed in the same manner as that of the Datu, but is of larger dimensions, and the piles are rather higher. Instead of steps, we found a ladder, rudely constructed of bamboo, and very crazy. This was so steep that it was necessary to use the hands in mounting it. I understood that the ladder was always removed in the night, for the sake of security. We entered at once into the presence-chamber, where the whole divan, if such it may be called, sat in arm-chairs, occupying the half of a large round table, covered with a white cotton cloth. On the opposite side of the table, seats were placed for us. On our approach, the Sultan and all his council rose, and motioned us to our seats. When we had taken them, the part of the room behind us was literally crammed with well-armed men. A few minutes were passed in silence, during which time we had an opportunity of looking at each other, and around the hall in which we were seated. The latter was of very common workmanship, and exhibited no signs of oriental magnificence. Overhead hung a printed cotton cloth, forming a kind of tester, which covered about half of the apartment. In other places the roof and rafters were visible. A part of the house was roughly partitioned off, to the height of nine or ten feet, enclosing, as I was afterwards told, the Sultan's sleeping apartment, and that appropriated to his wife and her attendants.
The Sultan is of middle height, spare and thin; he was dressed in a white cotton shirt, loose trousers of the same material, and slippers; he had no stockings; the bottom of his trousers was worked in scollops with blue silk, and this was the only ornament I saw about him. On his head he wore a small colored cotton handkerchief, wound into a turban, that just covered the top of his head.

His eyes were bloodshot, and had an uneasy wild look, showing that he was under the effects of opium, of which they all smoke large quantities. His teeth were as black as ebony, which, with his bright cherry-colored lips,* contrasted with his swarthy skin, gave him anything but a pleasant look.

On the left hand of the Sultan sat his two sons, while his right was occupied by his councillors; just behind him, sat the carrier of his betel-nut casket. The casket was of filigree silver, about the size of a small tea-caddy, of oblong shape, and rounded at the top. It had three divisions, one for the leaf, another for the nut, and a third for the lime. Next to this official was the pipe-bearer, who did not appear to be held in such estimation as the former.
I opened the conversation by desiring that the Datu would explain the nature of our visit, and tell the Sultan that I had come to make the treaty which he had some time before desired to form with the United States. $\dagger$

The Sultan replied that such was still his desire; upon which I told him I would draw one up for him that same day. While I was explaining to him the terms, a brass candlestick was brought in with a lighted tallow candle, of a very dark color, and rude shape, that showed but little art in the manufacture. This was placed in the center of the table, with a plate of Manila cigars. None of them, however, were offered to us, nor any kind of refreshment.

Our visit lasted nearly an hour. When we arose to take our leave, the Sultan and his divan did the same, and we made our exit with low bows on each side.
I looked upon it as a matter of daily occurrence for all those who came to the island to visit the Sultan; but the Datu Mulu took great pains to make me believe that a great favor had been granted in allowing us a sight of his ruler. On the other hand, I dwelt upon the condescension it was on my part to visit him, and I refused to admit that I was under any gratitude or obligation for the sight of His Majesty the Sultan Mohammed Damaliel Kisand, but said that he might feel grateful to me if he signed the treaty I would prepare for him.
On our return from the Sultan's to the Datu Mulu's house, we found even a greater crowd than before. The Datu, however, contrived to get us seats. The attraction which drew it together was to look at Mr. Agate, who was taking a sketch of Mohammed Polalu, the Sultan's son, and next heir to the throne. I had hoped to procure one of the Sultan, but this was declared to be impossible. The son, however, has all the characteristics of the Sulu, and the likeness was thought an excellent one. Mohammed Polalu is about twenty-three years of age, of a tall slender figure, with a long face, heavy and dull eyes, as though he was constantly under the influence of opium. So much, indeed, was he addicted to the use of this drugg, even according to the Datu Mulu's accounts, that

[^198]his strength and constitution were very much impaired. As he is kept particularly under the guardianship of the Datu, the latter has a strong interest in preserving this influence over him, and seems on this account to afford him every opportunity of indulging in this deplorable habit.

During our visit, the effects of a pipe of this drug were seen upon him; for but a short time after he had reclined himself on the Datu's couch and cushion, and taken a few whiffs, he was entirely overcome, stupid, and listless. I had never seen any one so young, bearing such evident marks of the effects of this deleterious drug. When but partially recovered from its effects he called for his betelnut, to revive him by its exciting effects. This was carefully chewed by his attendant to a proper consistency, moulded in a ball about the size of a walnut, and then slipped into the mouth of the heir apparent.

One of the requests I had made of the Sultan was, that the officers might have guides to pass over the island. This was at once said to be too dangerous to be attempted, as the datus of the interior and southern towns would in all probability attack the parties. I understood what this meant, and replied that I was quite willing to take the responsibility, and that the party should be well armed. To this the Sultan replied that he would not risk his own men. This I saw was a mere evasion, but it was difficult and would be dangerous for our gentlemen to proceed alone, and I therefore said no more. On our return to the Datu's, I gave them permission to get as far from the beach as they could, but I was afterwards informed by them that in endeavoring to penetrate into the woods, they were always stopped by armed men. This was also the case when they approached particular parts of the town, but they were not molested as long as their rambles were confined to the beach. At the Datu's we were treated to chocolate and negus in gilt-edged tumblers, with small stale cakes, which had been brought from Manila.

After we had sat some time I was informed that Mr. Dana missed his bowie-knife pistol, which he had for a moment laid down on a chest. I at once came to the conclusion that it had been stolen, and as the theft had occurred in the Datu's house, I determined to hold him responsible for it, and gave him at once to understand that I should do so, informing him that the pistol must be returned before the next morning, or he must take the consequences. This threw him into some consternation, and by my manner he felt that I was serious.

Captain Hudson and myself, previous to our return on board, visited the principal parts of the town. The Chinese quarter is separated by a body of water, and has a gateway that leads to a bridge. The bridge is covered by a roof, and on each side of it are small shops, which are open in front, and thus expose the goods they contain. In the rear of the shops were the dwellings of the dealers. This sort of bazaar contained but a very scanty assortment, and the goods were of inferior quality.

We visited some blacksmith-shops, where they were manufacturing krises and spears. These shops were open sheds; the fire was

Interior travel prohibited.
made upon the ground, and two wooden cylinders, whose valves were in the bottom, served for bellows; when used, they had movable pistons, which were worked by a man on an elevated seat, and answered the purpose better than could have been expected.

The kris is a weapon in which this people take great pride; it is of various shapes and sizes, and is invariably worn from infancy to old age; they are generally wavy in their blades, and are worn in wooden scabbards, which are neatly made and highly polished.

The market was well stocked with fruit and fish. Among the former the durian seemed to predominate; this was the first time we had seen it. It has a very disagreeable odour, as if decayed, and appears to emit a sulphuretted hydrogen gas, which I observed blackened silver. Some have described this fruit as delicious, but if the smell is not enough, the taste in my opinion will convince any one of the contrary.

Mr. Brackenridge made the following list of their fruits: Durian, Artocarpus integrifolia, Melons, water and musk, Oranges, mandarin and bitter, Pineapples, Carica papaya, Mangosteen, Bread-fruit, Coco and Betelnut. The vegetables were capsicums, cucumbers, yams, sweet-potatoes, garlic, onions, edible fern-roots, and radishes of the salmon variety, but thicker and more acrid in flavor.

In walking about the parts of the town we were permitted to enter, large slabs of cut granite were seen, which were presumed to be from China, where the walls of canals or streamlets are lined with it. But Dr. Pickering in his rambles discovered pieces that had been cut as if to form a monument, and remarked a difference between it and the Chinese kind. On one or two pieces he saw the mark No. 1, in black paint; the material resembled the Chelmsford granite, and it occurred to him that the stone had been cut in Boston. I did not hear of this circumstance until after we had left Sulu, and have little doubt now that the interdiction against our gentlemen visiting some parts of the town was owing to the fear they had of the discovery of this plunder. This may have been the reason why they so readily complied with my demands, in order to get rid of us as soon as possible, feeling themselves guilty, and being unprepared for defence; for, of the numerous guns mounted, few if any were serviceable.

The theft of the pistol was so barefaced an affair, that I made up my mind to insist on its restoration. At the setting of the watch in the evening, it had been our practice on board the Vincennes to fire a small brass howitzer. This frequently, in the calm evenings, produced a great reverberation, and rolled along the water to the surrounding islands with considerable noise. Instead of it, on this evening, I ordered one of the long guns to be fired, believing that the sound and reverberation alone would suffice to intimidate such robbers. One was accordingly fired in the direction of the town, which fairly shook the island, as they said, and it was not long before we saw that the rogues were fully aroused, for the clatter of gongs and voices that came over the water, and the motion of lights, convinced me that the pistol would be forthcoming in the morning. In this I was not mistaken, for at early daylight I was awakened by a special messenger from the Datu to tell me that the pistol was
found, and would be brought off without delay; that he had been searching for it all night, and had at last succeeded in finding it, as well as the thief, on whom he intended to inflict the bastinado. Accordingly, in a short time the pistol was delivered on board, and every expression of friendship and good-will given, with the strongest assurances that nothing of the kind should happen again.

As our naturalists could have no opportunity of rambling over the island of Sooloo, it was thought that one of the neighbouring islands (although not so good a field) would afford them many of the same results, and that they could examine it unmolested. Accordingly, at an early hour, they were despatched in boats for that purpose, with a sufficient guard to attend them in case of necessity. The island on which they landed, Marongas, has two hills of volcanic conglomerate and vesicular lava, containing angular

Marongas
island. fragments embedded. The bottom was covered with living coral, of every variety, and of different colors; but there was nothing like a regular coral shelf, and the beach was composed of bits of coral intermixed with dead shells, both entire and comminuted. The center of the island was covered with mangrove-bushes; the hills were cones, but had no craters on them. The mangroves had grown in clusters, giving the appearance of a number of small islets. This, with the neighboring islands, were thought to be composed in a great part of coral, but it was impossible for our gentlemen to determine the fact.

The day was exceedingly hot, and the island was suffering to such a degree from drought that the leaves in many cases were curled and appeared dry. On the face of the rocky cliff they saw many swallows (hirundo esculenta) flying in and out of the caverns facing the sea; but they were not fortunate enough to find any of the edible nests, so much esteemed by Chinese epicures.

At another part of the island they heard the crowing of a cock, and discovered a small village, almost hidden by the mangroves, and built over the water. In the neighborhood were several fishbaskets set out to dry, as well as a quantity of fencing for weirs, all made of rattan. Their shape was somewhat peculiar. After a little while the native fishermen were seen approaching, who evidently had a knowledge of their visit from the first. They came near with great caution in their canoes; but after the first had spoken and reconnoitered, several others landed, exhibiting no signs of embarrassment, and soon motioned our party off. To indicate that force would be resorted to, in case of refusal, at the same time they pointed to their arms, and drew their krises. Our gentlemen took this all in good part, and, after dispensing a few trifling presents among them, began their retreat with a convenient speed, without, however, compromising their dignity.

The excursion had been profitable in the way of collections, having yielded a number of specimens of shrubs and trees, both in flower and fruit; but owing to the drought, the herbaceous plants were, for the most part, dried up. Among the latter, however, they saw a large and fine terrestrial species of Epidendrum, whose stem grew to the height of several feet, and when surmounted by its flowers
reached twelve or fifteen feet high. Many of the salt-marsh plants seen in the Fijis, were also observed here. Besides the plants, some shells and a beautiful cream-colored pigeon were obtained.

During the day we were busily engaged in the survey of the harbor, and in making astronomical and magnetical observations on the beach, while some of the officers were employed purchasing curiosities, on shore, at the town, and alongside the ship. These consisted of krises, spears, shields, and shells; and the Sulus were not slow in comprehending the kind of articles we were in search of.

Few if any of the Sulus can write or read, though many talk Spanish. Their accounts are all kept by the slaves. Those who can read and write are, in consequence, highly prized. All the accounts of the Datu of Soung are kept in Dutch, by a young Malay from Tarnate, who writes a good hand, and speaks English, and whom we found exceedingly useful to us. He is the slave of the Datu, who employs him for this purpose only. He told us he was captured in a brig by the pirates of Basilan, and sold here as a slave, where he is likely to remain for life, although he says the Datu has promised to give him his freedom after ten years.

Horses, cows, and buffaloes are the beasts of burden, and a Sulu may usually be seen riding either one or the other, armed cap-a-pie, with kris, spear, and target, or shield.

They use saddles cut out of solid wood, and many ride with their stirrups so short that they bring the knees very high, and the riders look more like well-grown monkeys than mounted men. The cows and buffaloes are guided by a piece of thong, through the cartilage of the nose. By law, no swine are allowed to be kept on the island, and if they are bought, they are immediately killed. The Chinese are obliged to raise and kill their pigs very secretly, when they desire that species of food; for, notwithstanding the law and the prejudices of the inhabitants, the former continue to keep swine.
Natives.
The inhabitants of Sulu are a tall, thin, and effeminate-looking race: I do not recollect to have seen one corpulent person among them. Their faces are peculiar for length, particularly in the lower jaw and chin, with high cheek-bones, sunken, lack-lustre eyes, and narrow foreheads. Their heads are thinly covered with hair, which appears to be kept closely cropped. I was told that they pluck out their beards, and dye their teeth black with antimony, and some file them.

Their eyebrows appear to be shaven, forming a very regular and high arch, which they esteem a great beauty.

The dress of the common people is very like that of the Chinese, with loose and full sleeves, without buttons. The materials of which it is made are grass-cloths, silks, satins, or white cotton, from China. I should judge from the appearance of their persons, that they ought to be termed, so far as ablutions go, a cleanly people. There is no outward respect or obeisance shown by the slave to his master, nor is the presence of the Datu, or even of the Sultan himself, held in any awe. All appear upon an equality, and there does not seem to be any controlling power; yet it may be at once perceived that they are suspicious and jealous of strangers.

The Sulus, although they are ready to do any thing for the sake of plunder, even to the taking of life, yet are not disposed to hoard their ill-gotten wealth, and, with all their faults, cannot be termed avaricious.

They have but few qualities to redeem their treachery, cruelty, and revengeful dispositions; and one of the principal causes of their being so predominant, or even of their existence, is their inordinate lust for power. When they possess this, it is accompanied by a haughty, consequential, and ostentatious bravery. No greater affront can be offered to a Sulu, than to underrate his dignity and official consequence. Such an insult is seldom forgiven, and never forgotten. From one who has made numerous voyages to these islands, I have obtained many of the above facts, and my own observation assures me that this view of their character is a correct one. I would, however, add another trait, which is common among them, and that is cowardice, which is obvious, in spite of their boasted prowess and daring. This trait of character is universally ascribed to them among the Spaniards in the Philippines, who ought to be well acquainted with them.

The dress of the women is not unlike that of the men in appearance. They wear close jackets of various colors when they go abroad, and the same loose breeches as the men, but over them they usually have a large wrapper (sarong), not unlike the pareu of the Polynesian islanders, which is put round them like a petticoat, or thrown over the shoulders. Their hair is drawn to the back of the head, and around the forehead it is shaven in the form of a regular arch, to correspond with the eyebrows. Those that I saw at the Sultan's were like the Malays, and had light complexions, with very black teeth. The Datu thought them very handsome, and on our return he asked me if I had seen the Sultan's beauties. The females of Sulu have the reputation of ruling their lords, and possess much weight in the government by the influence they exert over their husbands.

It may be owing to this that there is little jealousy of their wives, who are said to hold their virtues in no very great estimation. In their houses they are but scantily clothed, though women of rank have always a large number of rings on their fingers, some of which are of great value, as well as earrings of fine gold. They wear no stockings, but have on Chinese slippers, or Spanish shoes. They are as capable of governing as their husbands, and in many cases more so, as they associate with the slaves, from whom they obtain some knowledge of Christendom, and of the habits and customs of other nations, which they study to imitate in every way.

The mode in which the Sulus employ their time may be exemplified by giving that of the Datu; for all, whether free or slave, endeavor to imitate the higher rank as far as is in their power. The datus seldom rise before eleven o'clock, unless they have some particular business; and the Datu Mulu complained of being sleepy in consequence of the early hour at which we had disturbed him.

On rising, they have chocolate served in gilt glassware, with some light biscuit, and sweetmeats imported from China or Manila, of which they informed me they laid in large supplies. They then

Superiority of women.
lounge about their houses, transacting a little business, and playing at various games, or, in the trading season, go to the meeting of the Ruma Bechara.

At sunset they take their principal meal, consisting of stews of fish, poultry, beef, eggs, and rice, prepared somewhat after the Chinese and Spanish modes, mixed up with that of the Malay. Although Moslems, they do not forego the use of wine, and some are said to indulge in it to a great extent. After sunset, when the air has become somewhat cooled by the refreshing breezes, they sally forth attended by their retainers to take a walk, or proceed to the bazaars to purchase goods, or to sell or to barter away their articles of produce. They then pay visits to their friends, when they are in the habit of having frequent convivial parties, talking over their bargains, smoking cigars, drinking wine and liquors, tea, coffee, and chocolate, and indulging in their favorite pipe of opium. At times they are entertained with music, both vocal and instrumental, by their dependants. Of this art they appear to be very fond, and there are many musical instruments among them. A datu, indeed, would be looked upon as uneducated if he could not play on some instrument.

It is considered polite that when refreshments are handed they should be partaken of. Those offered us by the Datu were such as are usual, but every thing was stale. Of fruit they are said to be very fond, and can afford to indulge themselves in any kinds. With all these articles to cloy the appetite, only one set meal a day is taken; though the poorer classes, fishermen and laborers, partake of two.
Government.
The government of the Sulu Archipelago is a kind of cligarchy, and the supreme authority is vested in the Sultan and the Ruma Bechara or trading council. This consists of about twenty chiefs, either datus, or their next in rank, called orangs, who are governors of towns or detached provinces. The influence of the individual chiefs depends chiefly upon the number of their retainers or slaves, and the force they can bring into their service when they require it. These are purchased from the pirates, who bring them to Sulu and its dependencies for sale. The slaves are employed in a variety of ways, as in trading prahus, in the pearl and bêche de mer fisheries, and in the search after the edible birds' nests.

A few are engaged in agriculture, and those who are at all educated are employed as clerks. These slaves are not denied the right of holding property, which they enjoy during their lives, but at their death it reverts to the master. Some of them are quite rich, and what may appear strange, the slaves of Sulu are invariably better off than the untitled freemen, who are at all times the prey of the hereditary datus, even of those who hold no official stations. By all accounts these constitute a large proportion of the population, and it being treason for any low-born freeman to injure or maltreat a datu, the latter, who are of a haughty, overbearing, and tyrannical disposition, seldom keep themselves within bounds in their treatment of their inferiors. The consequence is, the lower class of freemen are obliged to put themselves under the protection of some particular datu, which guards them from the encroachment of others.

The chief to whom they thus attach themselves, is induced to treat them well, in order to retain their services, and attach them to his person, that he may, in case of need, be enabled to defend himself from depredations, and the violence of his neighbors.

Such is the absence of legal restraint, that all find it necessary to go abroad armed, and accompanied by a trusty set of followers, who are also armed. This is the case both by day and night, and, according to the Datu's account, frequent affrays take place in the open streets, which not unfrequently end in bloodshed.

Caution is never laid aside, the only law that exists being that of force; but the weak contrive to balance the power of the strong by uniting. They have not only contentions and strife among themselves, but it was stated at Manila that the mountaineers of Sulu, who are said to be Christians, occasionally make inroads upon them. At Sulu, however, it did not appear that they were under much apprehension of these attacks. The only fear I heard expressed was by the Sultan, in my interview with him; and the cause of this, as I have already stated, was probably a desire to find an excuse for not affording us facilities to go into the interior. Within twenty years, however, the reigning sultan has been obliged to retire within his forts, in the town of Sulu, which I have before adverted to.

These people are hostile to the Sulus of the coast and towns, who take every opportunity to rob them of their cattle and property, for which the mountaineers seek retaliation when they have an opportunity. From the manner in which the Datu spoke of them, they are not much regarded. Through another source I learned that the mountaineers were Papuans, and the original inhabitants of the islands, who pay tribute to the Sultan, and have acknowledged his authority, ever since they were converted to Islamism. Before that time they were considered extremely ferocious, and whenever it was practicable they were destroyed. Others speak of an original race of Dyacks in the interior, but there is one circumstance to satisfy me that there is no confidence to be placed in this account, namely, that the island is not of sufficient extent to accommodate so numerous a population as some ascribe to it.

The forts consist of a double row of piles, filled in with coral blocks. That situated on the east side of the small stream may be said to mount a few guns, but these are altogether inefficient; and in another, on the west side,. which is rather a rude embankment than a fort, there are some twelve or fifteen pieces of large calibre; but I doubt very much if they had been fired off for years, and many of the houses built upon the water would require to be pulled down before these guns could be brought to bear upon any thing on the side of the bay, supposing them to be in a good condition; a little farther to the east of the town, I was informed they had a kind of stockade, but none of us were permitted to see it.

According to our estimates, and the information we received while at Sulu, the island itself does not contain more than thirty thousand inhabitants, of which the town of Soung may have six or seven thousand. The whole group may number about one hundred and thirty thousand. I am aware, however, that it is difficult to estimate
the population of a half-civilized people, who invariably exaggerate their own strength; and visitors are likewise prone to do the same thing. The Chinese comprise about an eighth of the population of the town, and are generally of the lower class. They are constantly busy at their trades, and intent upon making money.

At Soung, business seems active, and all, slaves as well as masters, seem to engage in it. The absence of a strong government leaves all at liberty to act for themselves, and the Ruma Bechara gives unlimited freedom to trade. These circumstances promote the industry of the community, and even that of the slave, for he too, as before observed, has a life interest in what he earns.

Soung being the residence of the Sultan, as well as the grand depot for all piratical goods, is probably more of a mart than any of the surrounding towns. In the months of March and April it is visited by several Chinese junks, who remain trading until the beginning of the month of August. If delayed after that time, they can scarcely return in safety, being unable to contend with the boisterous weather and head winds that then prevail in the Chinese seas. These junks are said to come chiefly from Amoy, where the cottons, etc., best suited for the Sulus are made. Their cargoes consist of a variety of articles of Chinese manufacture and produce, such as silk, satin goods, cottons, red and checked, grass-cloth clothing, handkerchiefs, cutlery, guns, ammunition, opium, lumber, china and glass-ware, rice, sugar, oil, lard, and butter. In return for this merchandise they obtain camphor, birds' nests, rattans, bêche de mer, pearls, and pearl-shells, coco, tortoise-shell, and wax; but there is no great quantity of these articles to be obtained, perhaps not more than two or three cargoes during the season. The trade requires great knowledge of the articles purchased, for the Chinese and Sulus are both such adepts in fraud, that great caution and circumspection are necessary.
Customs dues.
The duties on importation are not fixed, but are changed and altered from time to time by the Ruma Bechara. The following was stated to me as the necessary payments before trade could be carried on:

> A large ship, with Chinese on board, pays . . . . . . . . . $\$ 2,000$
> A large ship, without Chinese on board, pays... . . . 1,800

Small ships... . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1,500
Large brig. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1,000
Small brig. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 500
Schooners . . . . . . . . . . . . . . . . . . . . . . . . . . . from 150 to 400
This supposes them all to have full cargoes. That a difference should be made in a vessel with or without Chinamen, seems singular; but this; I was told, arose from the circumstance that English vessels take them on board, in order to detect and prevent the impositions of the Sulus.

Vessels intending to trade at Soung should arrive before the Chinese junks, and remain as long as they stay, or even a few days later. In trading with the natives, all operations ought to be carried on for cash, or if by barter, no delivery should be made until the articles to be taken in exchange are received. In short, it is necessary to
deal with them as though they were undoubted rogues, and this pleases them much more than to appear unsuspicious. Vessels that trade engage a bazaar, which they hire of the Ruma Bechara, and it is advisable to secure the good-will of the leading datus in that council by presents, and paying them more for their goods than others.

There are various other precautions necessary in dealing with this people; for they will, if possible, so act as to give rise to disputes, in which case an appeal is made to their fellows, who are sure to decide against the strangers. Those who have been engaged in this trade, advise that the prices of the goods should be fixed upon before the Sultan, and the scales of the Datu of Soung employed; for although these are quite faulty, the error is compensated by the articles received being weighed in the same. This also secures the Datu's good-will, by the fee (some fifty dollars) which he receives for the use of them. Thus it will be perceived that those who desire to trade with Sulu, must make up their minds to encounter many impositions, and to be continually watchful of their own interests.

Every possible precaution ought to be taken; and it will be found, the treatment will depend upon, or be according to the force or resolution that is displayed. In justice to this people it must be stated, there have been times when traders received every kindness and attention at the island of Sulu, and I heard it even said, that many vessels had gone there to refit; but during the last thirty or forty years, the reigning sultans and their subjects have become hostile to Europeans, of whom they plunder and destroy as many as they can, and this they have hitherto been allowed to do with impunity.

Although I have described the trade with Sulu as limited, yet it is capable of greater extension; and had it not been for the piratical habits of the people, the evil report of which has been so widely spread, Sulu would now have been one of the principal marts of the East. The most fertile parts of Borneo are subject to its authority. There all the richest productions of these Eastern seas grow in immense quantities, but are now left ungarnered in consequence of there being no buyers. The cost of their cultivation would be exceedingly low, and I am disposed to believe that these articles could be produced here at a lower cost than anywhere else.

Besides the trade with China, there is a very considerable one with Manila in small articles, and I found one of our countrymen engaged in this traffic, under the Spanish flag. To him I am indebted for much information that his opportunities of observation had given him.

The materials for the history of Sulu are meagre, and great doubt seems to exist in some periods of it. That which I have been able to gather is as follows:

The island of Sulu is generally believed to have been originally inhabited by Papuans, some of whom, as I have already stated, are still supposed to inhabit the mountainous part. The first intercourse had with them was by the Chinese, who went there in search of pearls. The Orang Dampuwans were the first of the Malays to form settlements on the islands; but after building towns, and
making other improvements, they abandoned the islands, in consequence, it is said, of the inhabitants being a perfidious race, having previously to their departure destroyed as many of the natives as they could.

The fame of the submarine riches of this archipelago reached Banjar or Borneo, the people of which were induced to resort there, and finding it to equal their expectation, they sent a large colony, and made endeavors to win over the inhabitants, and obtain thereby the possession of their rich isle. In order to confirm the alliance, a female of Banjarmassing, of great beauty, was sent, and married to the principal chief; and from this alliance the sovereigns of Sulu claim their descent. The treaty of marriage made Sulu tributary to the Banjarmassing empire.

After the Banjars had thus obtained possession of the archipelago, the trade in its products attracted settlers from the surrounding islands, who soon contrived to displace the aborigines, and drive them to the inaccessible mountains for protection.

When the Chinese took possession of the northern parts of Borneo, under the Emperor Songtiping, about the year 1375, the daughter of that prince was married to a celebrated Arabian chief named Sheriff Alli, who visited the shores of Borneo in quest of commerce. The descendants of this marriage extended their conquests not only over the Sulu Archipelago, but over the whole of the Philippines, and rendered the former tributary to Borneo. In three reigns after this event, the sultan of Borneo proper married the daughter of a Sulu chief, and from this union came Mirhome Bongsu, who succeeding to the throne while yet a minor, his uncle acted as regent. Sulu now wished to throw off the yoke of Borneo, and through the intrigues of the regent succeeded in doing so, as well as in retaining possession of the eastern side of Borneo, from Maludu Bay on the north, to Tulusyan on the south, which has ever since been a part of the Sulu territory.

This event took place before Islamism became the prevailing religion; but which form of idolatry, the Sulus pretend, is not now known. It is, however, believed the people on the coasts were Buddhists, while those of the interior were Pagans.

The first sultan of Sulu was Kamaludin, and during his reign one Sayed Alli, a merchant, arrived at Sulu from Mecca. He was a sherif, and soon converted one-half of the islanders to his own faith. He was elected sultan on the death of Kamaludin, and reigned seven years, in the course of which he became celebrated throughout the archipelago. Dying at Sulu, a tomb was erected to him there, and the island came to be looked upon by the faithful as the Mecca of the East, and continued to be resorted to as a pilgrimage until the arrival of the Spaniards.
Tawi Tawi.
Sayed Alli left a son called Batua, who succeeded him. The latter had two sons, named Sabudin and Nasarudin, who, on the death of their father, made war upon each other. Nasarudin, the youngest, being defeated, sought refuge on Tawi Tawi, where he established himself, and built a fort for his protection. The difficulties were finally compromised, and they agreed to reign together over Sulu. Nasarudin had two sons, called Amir and Bantilan, of whom the
former was named as successor to the two brothers, and on their deaths ascended the throne. During his reign another sherif arrived from Mecca, who succeeded in converting the remainder of the population to Islamism. Bantilan and his brother Amir finally quarrelled, and the latter was driven from Sulu to seek refuge in the island of Basilan, where he became sultan.

On the arrival of the Spaniards in 1566, a kind of desultory war was waged by them upon the various islands, in the hope of conquering them and extending their religion. In these wars they succeeded in gaining temporary possession of a part of Sulu, and destroyed the tomb of Sayed Alli. The Spaniards always looked upon the conversion of the Moslems to the true Catholic faith with great interest; but in the year 1646, the sultan of Magindanao succeeded in making peace, by the terms of which the Spaniards withdrew from Sulu, and were to receive from the sultan three cargoes of rice annually as a tribute.

In 1608, the small-pox made fearful ravages, and most of the inhabitants fled from the scourge. Among these was the heir apparent, during whose absence the throne became vacant, and another was elected in his stead. This produced contention for a short time, which ended in the elected maintaining his place.

This tribute continued to be paid until the flight of Amir to Basilan, about the year 1752, where he entered into a secret correspondence with the authorities at Zamboanga, and after two years a vessel was sent from Manila, which carried him to that capital, where he was treated as a prisoner of state.

In June, 1759, an English ship, on board of which was Dalrymple, then in the service of the East India Company, arrived at Sulu on a trading voyage. Dalrymple remained at Sulu for three months, engaged in making sales and purchases. The Sultan Bantilan treated him with great kindness, and sought the interest of Dalrymple to obtain the liberation of his brother, who was now held prisoner by the Spaniards at Manila, by telling him of the distress of his brother's wife, who had been left behind when Amir quitted the island, and had been delivered of twins, after he had been kidnapped by the Spaniards. Dalrymple entered into a pledge to restore Amir, and at the same time effected a commercial treaty between the East India Company and the Sulu chiefs. By this it was stipulated that an annual cargo should be sent to Sulu, and sold at one hundred per cent. profit, for which a return cargo should be provided for the China market, which should realize an equal profit there, after deducting all expenses. The overplus, if any, was to be carried to the credit of the Sulus. This appears to have been the first attempt made by the English to secure a regular commercial intercourse with this archipelago.

In the year 1760, a large fleet of Spanish vessels sailed from Manila, with about two thousand men, having the Sultan Amir on board, to cariy on a war against Sulu.

On their arrival, they began active operations. They were repelled on all sides, and after seven days' ineffectual attempts, they gave up their design. They returned to Manila, it is said, with a loss of half their number, and without having done any injury

## The English

 treaty.to the Sulus. Not discouraged with this failure, the Spaniards, about two years after, organized a still larger force, which is estimated by some accounts as high as ten thousand men. Although this failed in its attempts on the fort at Soung, the Spaniards obtained possession of Tanjong Matonda, one of the small ports on the island, where they erected a church and fort. Here they established a colony, and appointed a governor. The inhabitants upon this deserted their habitations in the neighborhood, and fled to the mountains, which, it is said, excited the mountaineers, a host of whom, with their chief, whose name was Sri Kala, determined to rush upon the Spaniards, and annihilate them. Having to contend against disciplined troops, it was not an easy task to succeed. But Sri Kala had a follower, named Sigalo, who offered to lead the host to battle against the Spaniards, and to exterminate them, or die in the attempt. The chief accepted his offer, and Sigalo, with a chosen few, marched towards the fort, leaving the rest of the mountaineers in readiness to join them at an appointed signal, and rush into the fort en masse.

Sri Kala and Sigalo, in order to lull the watchfulness of the Spaniards, took with them a young woman, of exquisite beauty, named Purmassuri. The lustful Spaniards were thus thrown off their guard, the signal was given, and the host, rushing forward, entered the fort, every Spaniard within which was slain. A few only, who were on the outside, escaped to the vessels, which set sail, and after encountering various mishaps, returned to Manila.

Some time after this the Sultan Bantilan died, and his son Alim-ud-deen was proclaimed sultan. Dalrymple did not return until 1762, with a part of the appointed cargo; but the vessel in which the larger part had been shipped, failed to arrive, from not being able to find Sulu, and went to China. Thence she proceeded to Manila, and afterwards to Sulu. The captain of the latter vessel gave a new credit to the Sulus, before they had paid for their first cargo; and on the arrival of Dalrymple the next time, he found that the small-pox had carried off a large number of the inhabitants, from which circumstance all his hopes of profit were frustrated. He then obtained for the use of the East India Company, a grant of the island of Balambangan, which lies off the north end of Borneo, forming one side of the Straits of Balabac, the western entrance to the Sulu Sea. Here he proposed to establish a trading post, and after having visited Madras, he took possession of this island in 1763.

In October, 1762, the English took Manila, where the Sultan Amir was found by Dalrymple, who engaged to reinstate him on his throne, if he would cede to the English the north end of Borneo, as well as the south end of Palawan. This he readily promised, and he was, in consequence, carried back to Sulu and reinstated; his nephew, Alim-ud-deen, readily giving place to him, and confirming the grant to the East India Company, in which the Ruma Bechara joined.

After various arrangements, the East India Company took possession of Balambangan, in the year 1773, and formed a settlement there with a view of making it an emporium of trade for Eastern
commodities. Troops and stores were sent from India, and the population began to increase by settlers, both Chinese and Malays, who arrived in numbers. In the year 1775, the fort, notwithstanding all the treaties and engagements between Dalrymple and the Sultan, was surprised by the Sulus, and many of the garrison put to death. This virtually put an end to the plans of the English, although another attempt was made to re-establish the settlement by Colonel Farquhar, in 1803; but it was thought to be too expensive a post, and was accordingly abandoned in the next year. This act of the Sulus fairly established their character for perîdy, and ever since that transaction they have been looked upon as treacherous in the highest degree, and, what is singular, have been allowed to carry on their piracies quite unmolested. The taking of Balambangan has been generally imputed to the treacherous disposition and innate love of plunder among the Sulus, as well as to their fear that it would destroy the trade of Sulu by injuring all that of the archipelago. But there are strong reasons for believing that this dark deed owed its origin in part to the influence of the Spaniards and Dutch, who looked with much distrust upon the growth of the rival establishment. Such was the jealousy of the Spaniards, that the governor of the Philippines peremptorily required that Balambangan should be evacuated. The Sulus boast of the deed, and admit that they received assistance from both Zamboanga and Ternate, the two nearest Spanish and Dutch ports. These nations had great reasons to fear the establishment of a power like that of the East India Company, in a spot so favorably situated to secure the trade of the surrounding islands, possessing fine harbors, and in every way adapted to become a great commercial depot. Had it been held by the East India Company but for a few years, it must have become what Singapore is now.

The original planner of this settlement is said to have been Lord Pigot; but the merit of carrying it forward was undoubtedly due to Dalrymple, whose enterprising mind saw the advantage of the situation, and whose energy was capable of carrying the project successfully forward.

Since the capture of Balambangan, there has been no event in the history of Sulu that has made any of the reigns of the Sultans memorable, although fifteen have since ascended the throne.

Sulu has from all the accounts very much changed in its character as well as population since the arrival of the Spaniards, and the establishment of their authority in the Philippines. Before that event, some accounts state that the trade with the Chinese was of great extent, and that from four to five hundred junks arrived annually from Cambojia, with which Sulu principally traded. At that time the population is said to have equalled in density that of the thickly-settled parts of China.

The government has also undergone a change; for the Sultan, who among other Malay races is usually despotic, is here a mere cipher, and the government has become an oligarchy. This change has probably been brought about by the increase of the privileged class of Datus, all of whom were entitled to a seat in the Ruma Bechara until about the year 1810, when the great inconvenience

Victory over English.
of so large a council was felt, and it became impossible to control it without great difficulty and trouble on the part of the Sultan. The Ruma Bechara was then reduced until it contained but six of the principal Datus, who assumed the power of controlling the state. The Ruma Bechara, however, in consequence of the complaints of many powerful Datus, was enlarged; but the more powerful, and those who have the largest numerical force of slaves, still rule over its deliberations. The whole power, within the last thirty years, has been usurped by one or two Datus, who now have monopolized the little fortign trade that ccmes to these islands. The Sultan has the right to appoint his successor, and generally names him while living. In default of this, the choice devolves upon the Ruma Bechara, who elect by a majority.

From a more frequent intercourse with Europeans and the discovery of new routes through these seas, the opportunities of committing depredations have become less frequent, and the fear of detection greater. By this latter motive they are more swayed than by any thing else, and if the Sulus have ever been bold and daring robbers on the high seas, they have very much changed.

Many statements have been made and published relative to the piracies committed in these seas, which in some cases exceed, and in others fall short, of the reality. Most of the piratical establishments are under the rule, or sail under the auspices of the Sultan and Ruma Bechara of Sulu, who are more or less intimately connected with them. The share of the booty that belongs to the Sultan and Ruma Bechara is twenty-five per cent. on all captures, whilst the Datus reccive a high price for the advance they make of guns and powder, and for the services of their slaves.

The following are the piratical establishments of Sulu, obtained from the most authentic sources, published as well as verbal. The first among these is the port of Soung, at which we anchored, in the island of Sulu; not so much from the number of men available here for this pursuit, as the facility of disposing of the goods. By the Spaniards they are denominated Illanun or Lanuns pirates.* There are other rendezvous on Pulo Toolyan, at Bohol, Tonho, Pilas, Tawi Tawi, Sumlout, Pantutaran, Parodasan, Palawan, and Basilan, and Tantoli on Celebes. These are the most noted, but there are many minor places, where half a dozen prahus are fitted out. Those of Sulu, and those who go under the name of the Lanuns, have prahus of larger size, and better fitted. They are from twenty to thirty tons burden, and are propelled by both sails and oars. They draw but little water, are fast sailers, and well adapted for navigating through these dangerous seas. These pirates are supposed to possess in the whole about two hundred prahus, which usually are manned with from forty to fifty pirates; the number therefore engaged in this business, may be estimated at ten thousand. They are armed with muskets, blunderbusses, krises, hatchets, and spears, and at times the vessels have one or two large guns mounted. They infest the Macassar Strait, the Celebes Sea, and the Sulu Sea. Soung is the only place where they can dispose of their plunder

[^199]to advantage, and obtain the necessary outfits. It may be called the principal resort of these pirates, where well-directed measures would result in effectually suppressing the crime.

Besides the pirates of Sulu, the commerce of the eastern islands is vexed with other piratical establishments. In the neighboring seas, there are the Malay pirates, who have of late years become exceedingly troublesome. Their prahus are of much smaller size than those of Sulu, being from ten to twelve tons burden, but in proportion they are much better manned, and thus are enabled to ply with more efficiency their oars or paddles. These prahus frequent the shores of Malacca Straits, Cape Roumania, the Carimon Isles, and the neighboring straits, and at times they visit the Rhio Straits. Some of the most noted, I was informed, were fitted out from Johore, in the very neighborhood of the English authorities at Singapore; they generally have their haunts on the small islands on the coast, from which they make short cruises.

They are noted for their arrangements for preventing themselves from receiving injury, in the desperate defences that are sometimes made against them. These small prahus have usually swivels mounted, which, although not of great calibre, are capable of throwing a shot beyond the range of small-arms. It is said that they seldom attempt an attack unless the sea is calm, which enables them to approach their victims with more assurance of success, on account of the facility with which they are enabled to manage their boats. The frequent calms which occur in these seas between the land and sea breezes, afford them many opportunities of putting their villanous plans in operation; and the many inlets and islets, with which they are well acquainted, afford places of refuge and ambush, and for concealing their booty. They are generally found in small flotillas of from six to twenty prahus, and when they have succeeded in disabling a vessel at long shot, the sound of the gong is the signal for boarding, which, if successful, results in a massacre more or less bloody, according to the obstinacy of the resistance they have met with.

In the winter months, the Malacca Straits are most infested with them; and during the summer, the neighborhood of Singapore, Point Rumania, and the channels in the vicinity. In the spring, from February to May, they are engaged in procuring their supplies, in fishing, and refitting their prahus for the coming year.

I have frequently heard plans proposed for the suppression of these pirates, particularly of those in the neighborhood of the settlements under British rule. The European authorities are much to blame for the quiescent manner in which they have so long borne these depredations, and many complaints are made that Englishmen, on being transplanted to India, lose that feeling of horror for deeds of blood, such as are constantly occurring at their very doors, which they would experience in England. There are, however, many difficulties to overcome before operations against the pirates can be effective. The greatest of these is the desire of the English to secure the good-will of the chiefs of the tribes by whom they are surrounded. They thus wink at their piracies on the vessels of other nations, or take no steps to alleviate the evils of

[^200]slavery. Indeed the language that one hears from many intelligent men who have long resided in that part of the world is, that in no country where civilization exists does slavery exhibit so debasing a form as in her Indian possessions. Another difficulty consists in the want of minute knowledge of the coasts, inlets, and hidingplaces of the pirates, and this must continue to exist until proper surveys are made. This done, it would be necessary to employ vessels that could pursue the pirates everywhere, for which purpose steamers naturally suggest themselves.

What will appear most extraordinary is, that the very princes who are enjoying the stipend for the purchase of the site whereon the English authority is established, are believed to be the most active in equipping the prahus for these piratical expeditions; yet no notice is taken of them, although it would be so easy to control them by withholding payment until they had cleared themselves from suspicion, or by establishing residents in their chief towns.

Another, and a very different race of natives who frequent the Sulu Archipelago, must not be passed by without notice. These are the Bajow divers or fishermen, to whom Sulu is indebted for procuring the submarine treasures with which her seas are stored. They are also very frequently employed in the bêche de mer or trepang fisheries among the islands to the south. The Bajows generally look upon Macassar as their principal place of resort. They were at one time believed to be derived from Johore, on the Malayan peninsula; at another, to be Buguese; but they speak the Sulu dialect, and are certainly derived from some of the neighboring islands. The name of Bajows, in their tongue, means fishermen. From all accounts, they are allowed to pursue their avocations in peace, and are not unfrequently employed by the piratical datus, and made to labor for them. They resort to their fishing-grounds in fleets of between one and two hundred sail, having their wives and children with them, and in consequence of the tyranny of the Sulus, endeavor to place themselves under the protection of the flag of Holland, by which nation this useful class of people is encouraged. The Sulu Seas are comparatively little frequented by them, as they are unable to dispose of the produce of their fisheries for want of a market, and fear the exactions of the Datus. Their prahus are about five tons each. The Bajows at some islands are stationary, but are for the most part constantly changing their ground. The Spanish authorities in the Philippines encourage them, it is said, to frequent their islands, as without them they would derive little benefit from the banks in the neighboring seas, where quantities of pearl-oysters are known to exist, which produce pearls of the finest kind. The Bajows are inoffensive and very industrious, and in faith Mahomedans.

The climate of Sulu during our short stay, though warm, was agreeable. The time of our visit was in the dry season, which lasts from October till April, and alternates with the wet one, from May till September. June and July are the windy months, when strong breezes blow from the westward. In the latter part of August and September, strong gales are felt from the south, while in December and January the winds are found to come from the northward;
but light winds usually prevail from the southwest during the wet season, and from the opposite quarter, the dry, following closely the order of the monsoons in the China seas. As to the temperature, the climate is very equable, the thermometer seldom rising above $90^{\circ}$ or falling below $70^{\circ}$.

Diseases are few, and those that prevail arise from the manner in which the natives live. They are from that cause an unhealthylooking race. The small-pox has at various times raged with great violence throughout the group, and they speak of it with great dread. Few of the natives appeared to be marked with it, which may have been owing, perhaps, to their escaping this disorder for some years. Vaccination has not yet been introduced among them, nor have they practiced inoculation.

Notwithstanding Soung was once the Mecca of the East, its people have but little zeal for the Mahomedan faith. It was thought at once time that they had almost forgotten its tenets, in consequence of the neglect of all their religious abservances. The precepts which they seem to regard most are that of abstaining from swine's flesh, and that of being circumcised. Although polygamy is not interdicted, few even of the datus have more than one wife.

Soung Road offers good anchorage; and supplies of all kinds may be had in abundance. Beef is cheap, and vegetables and fruits at all seasons plenty.

Our observations placed the town in latitude $6^{\circ} 01^{\prime} \mathrm{N}$. , longitude $120^{\circ} 55^{\prime} 51^{\prime \prime} \mathrm{E}$.

Having concluded the treaty and other business that had taken me to Sulu, we took our departure for the Straits of Balabac, the western entrance into this sea, with a fine breeze to the eastward. By noon we had reached the group of Pangootaaraang, consisting of five small islands. All of these are low, covered with trees, and without lagoons. They presented a great contrast to Sulu, which was seen behind us in the distance. The absence of the swell of the ocean in sailing through this sea is striking, and gives the idea of navigating an extensive bay, on whose luxuriant islands no surf breaks. There are, however, sources of danger that incite the navigator to watchfulness and constant anxiety; the hidden shoals and reefs, and the sweep of the tide, which leave him no control over his vessel.

Through the night, which was exceedingly dark, we sounded every twenty minutes, but found no bottom; and at daylight on the 7 th , we made the islands of Cagayan Sulu, in latitude $7^{\circ} 03^{\prime} 30^{\prime \prime} \mathrm{N}$., longitude $118^{\circ} 37^{\prime} \mathrm{E}$. The tide or current was passing the isalnds to the west-southwest, three quarters of a mile per hour; we had soundings of seventy-five fathoms. Cagayan Sulu has a pleasant appearance from the sea, and may be termed a high island. It is less covered with undergrowth and mangrove-bushes than the neighboring islands, and the reefs are comparatively small. It has fallen off in importance; and by comparing former accounts with those I received, and from its present aspect, it would seem that it has decreased both in population and products. Its caves formerly supplied a large quantity of edible birds' nests; large numbers of
cattle were to be found upon it; and its cultivation was carried on to some extent. These articles of commerce are not so much attended to at the present time, and the bêche de mer and tortoise-shell, formerly brought hither, are now carried to other places. There is a small anchorage on the west side, but we did not visit it. There are no dangers near these small islands that may not be guarded against. Our survey extended only to their size and situation, as I deemed it my duty to devote all the remainder of the time I had to spare to the Balabac Straits.
Balabac straits.
After the night set in, we continued sounding every ten minutes, and occasionally got bottom in from thirty to seventy fathoms. At midnight, the water shoaled to twenty fathoms, when I dropped the anchor until daylight. We shortly afterwards had a change of wind, and a heavy squall passed over us.

In the morning we had no shoal ground near us, and the bank on which we had anchored was found to be of small size; it is probable that we had dropped the anchor on the shoalest place. Vessels have nothing to fear in this respect.

At 9:00 a. m. of the 8 th, we made the Mangsee Islands ahead of us, and likewise Balabac to the north, and Balambagan to the south. Several sand-banks and extensive reefs were also seen between them. On seeing the ground on which we had to operate, of which the published charts give no idea whatever, I determined to proceed, and take a central position with the ship under the Mangsee Islands; but in order not to lose time, I hoisted out and dropped two boats, under Lieutenant Perry, to survey the first sand-bank we came to, which lies a few miles to the eastward of these islands, with orders to effect this duty and join me at the anchorage, or find a shelter under the lee of the islands.

At half-past two p. m. we anchored near the reef, in thirty-six fathoms water. I thought myself fortunate in getting bottom, as the reefs on closing with them seemed to indicate but little appearance of it.

The rest of the day was spent in preparing the boats for our operations. I now felt the want of the tender. Although in the absence of this vessel, great exposure was necessary to effect this survey, I found both officers and. men cheerful and willing. The parties were organized, - the first to proceed to the north, towards Balabac Island, to survey the intermediate shoals and reefs, under Lieutenant Emmons and Mr. Totten; the second to the south, under Lieutenants Perry and Budd; and Mr. Hammersly for the survey of the shoals of Balambangan and Banguey, and their reefs. The examination of the Mangsee Islands, and the reefs adjacent, with the astronomical and magnetic observations, etc., devolved on myself and those who remained on board the ship.

The weather was watched with anxiety, and turned out disagreeable, heavy showers and strong winds prevailing; notwithstanding, the boats were despatched, after being as well protected against it as possible. We flattered ourselves that these extensive reefs would produce a fine harvest of shells; but, although every exertion was made in the search, we did not add as many to our collections as we anticipated. Some land-shells, however, were found that
we little expected to meet with, for many of the trees were covered with them, and on cutting them down, large quantities were easily obtained. Mr. Peale shot several birds, among which was a Nicobar pigeon; some interesting plants and corals were also added. On the island a large quantity of drift-wood was found, which with that which is growing affords ample supplies of fuel for ships. No fresh water is to be had, except by digging, the island being but a few feet above high-water mark.

Although the time was somewhat unfavorable, Lieutenant Emmons and party executed their orders within the time designated, and met with no other obstructions than the inclemency of the weather. This was not, however, the case with Lieutenant Perry, who, near a small beach on the island of Balambangan, encountered some Sulus, who were disposed to attack him. The natives, no doubt, were under the impression that the boats were from some shipwrecked vessel. They were all well armed, and apparently prepared to take advantage of the party if possible; but, by the prudence and forbearance of this officer, collision was avoided, and his party saved from an attack.

The island of Balambangan was through the instrumentality of Mr . Dalrymple, as heretofore stated, obtained from the Sulus for a settlement and place of deposit, by the East India Company, who took possession of it in 1773. Its situation off the northern end of Borneo, near the fertile district of that island, its central position, and its two fine ports, offered great advantages for commerce, and for its becoming a great entrepot for the riches of this archipelago. Troops, and stores of all kinds, were sent from India; numbers of Chinese and Malays were induced to settle; and Mr. Herbert, one of the council of Bencoolen, was appointed governor. It had been supposed to be a healthy place, as the island was elevated, and therefore probably free from malaria; but in 1775 the native troops from India became much reduced from sickness, and the post consequently much weakened. This, with the absence of the cruisers from the harbor, afforded a favorable opportunity for its capture; and the wealth that it was supposed to contain created an inducement that proved too great for the hordes of marauding pirates to resist. Choosing their time, they rushed upon the sentries, put them to death, took possession of the guns, and turned them against the garrison, only a few of whom made their escape on board of a small vessel. The booty in goods and valuables was said to have been very large, amounting to nearly four hundred thousand pounds sterling.

Although Borneo offers many inducements to commercial enterprise, the policy of the Dutch Company has shut themselves out, as well as others, by interdicting communication. In consequence, except through indirect channels, there has been no information obtained of the singular and unknown inhabitants of its interior. This, however, is not long destined to be the case.

Mr. Brooke, an English gentleman of fortune, has, since our passage through these seas, from philanthropic motives, made an agreement with the rajah of Sarawack, on the northern and western side of Borneo, to cede to him the administration of that portion
of the island. This arrangement it is believed the British government will confirm, in which event Sarawack will at once obtain an importance among the foreign colonies, in the Eastern seas, second only to that of Singapore.

The principal inducement that has influenced Mr. Brooke in this undertaking is the interest he feels in the benighted people of the interior, who are known under the name of Dyack, and of whom some extraordinary accounts have been given.

A few of these, which I have procured from reputable sources, I will now relate, in order that it may be seen among what kind of people this gentleman has undertaken to introduce the arts of civilization.

The Dyacks are, by all accounts, a fine race, and much the most numerous of any inhabiting Borneo. They are almost exclusively confined to the interior, where they enjoy a fine climate, and all the spontaneous productions of the tropics. They are believed to be the aborigines of the island. The name of Dyack seems to be more particularly applied to those who live in the southern section of Borneo. To the north they are called Idaan or Tirun, and those so termed are best known to the Sulus, or the inhabitants of that part of the coast of Borneo over which the Sulus rule. In personal appearance, the Dyacks are slender, have higher foreheads than the Malays, and are a finer and much better-looking people. Their hair is long, straight, and coarse, though it is generally cropped short round the head. The females are spoken of as being fair and handsome, and many of those who have been made slaves are to be seen among the Malays.

In manners the Dyacks are described as simple and mild, yet they are characterized by some of the most uncommon and revolting customs of barbarians. Their government is very simple; the elders in each village for the most part rule; but they are said to have chiefs that do not differ from the Malay rajahs. They wear no clothing except the maro, and many of them are tattooed, with a variety of figures, over their body. They live in houses built of wood, that are generally of large size, and frequently contain as many as one hundred persons. These houses are usually built on piles, divided into compartments, and have a kind of veranda in front, which serves as a communication between the several families. The patriarch, or elder, resides in the middle. The houses are entered by ladders, and have doors, but no windows. The villages are protected by a sort of breastwork.

Although this people are to be found throughout all Borneo, and even within a few miles of the coast, yet they do not occupy any part of its shores, which are held by Malays, or Chinese settlers. There is no country more likely to interest the world than Borneo. All accounts speak of vast ruins of temples and palaces, throughout the whole extent of its interior, which the ancestors of the present inhabitants could not have constructed. The great resemblance these bear to those of China and Cambojia has led to the belief that Borneo was formerly peopled by those nations; but all traditions of the origin of these edifices have been lost; and so little is now known of the northern side of Borneo, that it would be
presumption to indulge in any surmises of what may have been its state during these dark ages. Even the Bugis priests, who are the best-informed persons in the country, have no writings or traditions that bear upon the subject; and the few scattered legends of Eastern origin, can afford no proof of the occurrence of the events they commemorate in any particular locality.

The accounts of the habits of the Dyacks are discrepant. Some give them credit for being very industrious, while others again speak of them as indolent. They are certainly cultivators of the soil, and in order to obtain the articles they need, will work assiduously. Many of them are employed in collecting gold-dust, and some in the diamond mines; and they will at times be found procuring gums, rattans, etc., from their native forests for barter. They are a people of great energy of character, and perseverance in the attainment of their object, particularly when on war-parties, or engaged in hunting.
Their food consists of rice, hogs, rats, snakes, monkeys, and many kinds of vermin, with which this country abounds.

Their chief weapon is the parang or heavy knife, somewhat like the kris. It is manufactured of native iron and steel, with which the coast of the country is said to abound. They have a method of working it which renders it unnecessary for them to look to a foreign supply; the only articles of foreign hardware that they are said to desire, are razors, out of which to make their cockspurs. One thing seems strange: although asserted upon good authority, that the iron and steel of the coast are thought to be superior by foreigners, they are not to be compared with that which is found in the interior, and manufactured by the Dyacks. All the best krises used by the Malay rajahs and chiefs, are obtained from the interior. Some of these are exquisitely manufactured, and so hard that, without turning the edge, they cut ordinary wrought iron and steel.

Among their other weapons is the sumpit, a hollow tube, through which they blow poisoned arrows. The latter are of various kinds, and those used in war are dipped in the sap of what the natives term the "upo." The effect of this poison is almost instantaneous, and destroys life in four or five minutes. Those who have seen a wound given accidentally, describe the changes that the poison occasions as plainly perceptible in its progress. Before using the arrow, its poisoned point is dipped in lime-juice to quicken it. The range of the sumpit is from fifty to sixty yards. Although the arrows are poisoned, yet it is said they sometimes eat the games they kill with them, parboiling it before it is roasted, which is thought to extract the poison. Firearms, respecting which they have much fear, have not yet been introduced among them; indeed, it is said that so easily are they intimidated by such weapons, that on hearing a report of a gun they invariably run away. Each individual in a host would be impressed with the belief that he was the one that was to be shot.

They address their prayers to the maker of the world, whom they call Dewatta, and this is all the religion they have. There are many animals and birds held by them in high veneration, and
they are close observers of the flight of birds, from which they draw prognostics. There is in particular a white-headed eagle or kite, upon whose flight and cries they put great reliance, and consult them in war or on any particular expedition. For this purpose they draw numbers of them together, and feed them by scattering rice about. It is said their priests consult their entrails also on particular occasions, to endeavor to look into future events.

In the performance of their engagements and oaths, they are most scrupulous. They seem to have some idea of a future life, and that on the road to their elysium they have to pass over a long tree, which requires the assistance of all those they have slain in this world. The abode of happy spirits is supposed to be on the top of Kini Balu, one of their loftiest mountains, and the portals are guarded by a fiery serpent, who does not suffer any virgin to pass into the celestial paradise.

Polygamy does not exist among them, but they have as concubines slaves, who are captured in their wars or rather predatory expeditions. If a wife proves unfaithful to her husband, he kills several of his slaves, or inflicts upon her many blows, and a divorce may be effected by the husband paying her a certain price, and giving up her clothes and ornaments, after which he is at liberty to marry another. The women, however, exercise an extraordinary influence over the men.

But of all their peculiar traits, there is none more strange than the passion they seem to indulge for collecting human heads. These are necessary accompaniments in many transactions of their lives, particularly in their marriages, and no one can marry unless he has a certain number of heads; indeed, those who cannot obtain these are looked upon with disdain by the females. A young man wishing to wed, and making application to marry her for whom he has formed an attachment, repairs with the girl's father to the rajah or chief, who immediately inquires respecting the number of heads he has procured, and generally decides that he ought to obtain one or two more, according to his age, and the number the girl's father may have procured, before he can be accepted. He at once takes his canoe and some trusty followers, and departs on his bloody errand, waylaying the unsuspecting or surprising the defenceless, whose head he immediately cuts off, and then makes a hurried retreat. With this he repairs to the dwelling of his mistress, or sends intelligence of his success before him. On his arrival, he is met by a joyous group of females, who receive him with every demonstration of joy, and gladly accept his ghastly offering.

Various barbarous ceremonies now take place, among which the heads undergo inspection to ascertain if they are fresh; and, in order to prove this, none of the brain must be removed, nor must they have been submitted to smoke to destroy the smell. After these preliminaries, the family honor of the bride is supposed to be satisfied, and she is not allowed to refuse to marry. A feast is now made, and the couple are seated in the midst naked, holding the bloody heads, when handfuls of rice are thrown over them, with prayers that they may be happy and fruitful. After this, the bridegroom repairs in state to the house of the bride, where he
is received at the door by one of her friends, who sprinkles him with the blood of a cock, and her with that of a hen. This completes the affair, and they are man and wife.
Funerals are likewise consecrated by similar offerings, the corpse remaining in the house until a slave can be procured, by purchase or otherwise, whom they design to behead at the time the body is burnt. This is done in order that the defunct may be attended by a slave on his way to the other world or realms of bliss. After being burnt, the ashes of the deceased are gathered in an urn, and the head of the slave preserved and placed near it.

In some parts, a rajah or chief is buried with great pomp in his war habiliments, and food and his arms are placed at his side. A mound is erected over him, which is encircled with a bamboo fence, upon which a number of fresh heads are stuck, all the warriors who have been attached to him bringing them as the most acceptable offering; and subsequently these horrid offerings are renewed.

The Dyacks are found also in the Celebes island, but there, as in Borneo, they are confined to the interior. I have already mentioned that they were supposed to have been the original inhabitants of the Sulu Archipelago. The Sulus speak of the country of the Dyacks as being exceedingly fertile and capable of producing every thing. The north end of Borneo is particularly valuable, as its produce is easily transported from the interior, where much of the land is cultivated. I have obtained much more information in relation to this people, in a variety of ways, from individuals as well as from the published accounts, which are to be found at times in the Eastern prints; but as this digression has already extended to a great length, I trust that enough has been said to enable the reader to contrast it with the natives who inhabit the islands that dot the vast Pacific Ocean, and to make him look forward with interest to the developments that the philanthropic exertions of Mr. Brooke may bring to light.

Having completed our duties here, the boats were hoisted in, after despatching one to leave orders for Mr. Knox of the Flying-Fish, in a bottle tied to a flagstaff.

On the afternoon of the 12th, we got under way to proceed direct to Singapore, and passed through the channel between the reef off the Mangsee Islands, and those of Balambangan and Banguey. We found this channel clear, and all the dangers well defined.

As the principal objects of my visit were to ascertain the disposition and resources of the Sulus for trade, and to examine the straits leading into the Sulu seas, in order to facilitate the communication with China, by avoiding on the one hand the eastern route, and on the other the dangers of the Palawan Passage, it may be as well to give the result of the latter inquiry, referring those who may be more particularly interested to the Hydrographical Atlas and Memoir.

The difficulties in the Palawan Passage arising from heavy seas and fresh gales do not exist in the Sulu Sea, nor are the shoals so numerous or so dangerous. In the place of storms and rough water, smooth seas are found, and for most of the time moderate breezes, which do not subject a vessel to the wear and tear experienced in beating up against a monsoon.

Advantages
of Sulu treaty.

The Balabac Straits may be easily reached, either from Singapore, or by beating up along the western shore of Borneo. When the straits are reached, a vessel by choosing her time may easily pass through them by daylight, even by beating when the wind is ahead. Once through, the way is clear, with the exception of a few coral lumps; the occasional occurrence of the north wind will enable a vessel to pass directly to the shores of the island of Panay. A fair wind will ordinarily prevail along the island, and, as I have already mentioned, it may be approached closely. The passage through to the eastward of Mindoro Island may be taken in preference to that on the west side through the Mindoro Strait, and thus all the reefs and shoals will be avoided. Thence, the western coast of Luzon will be followed to the north, as in the old route.

I do not think it necessary to point out any particular route through the Sulu Sea, as vessels must be guided chiefly as the winds blow, but I would generally avoid approaching the Sulu Islands, as the currents are more rapid, and set rather to the southward. Wherever there is anchorage, it would be advisable to anchor at night, as much time might thus be saved, and a knowledge of the currents or sets of the tides obtained. Perhaps it would be as well to caution those who are venturesome, that it is necessary to keep a good look-out, and those who are timid, that there does not appear to be much danger from the piratical prahus, unless a vessel gets on shore; in that case it will not be long before they will be seen collecting in the horizon in large numbers.

The treaty that I made with the Sultan, if strictly enforced on the first infraction, will soon put an end to all the dangers to be apprehended from them. To conclude, I am satisfied that under ordinary circumstances, to pass through the Sulu Sea will shorten by several days the passage to Manila or Canton, and be a great saving of expense in the wear and tear of a ship and her canvass.

On the 13th, we passed near the location of the Viper Shoal, but saw nothing of it. It is, therefore, marked doubtful on the chart. As I had but little time to spare, the look-outs were doubled, and we pursued our course throughout the night, sounding as we went every fifteen minutes; but nothing met our view.

On the 14th, although we had the northeast monsoon blowing fresh, we experienced a current of twenty-two miles setting to the north. This was an unexpected result, as the currents are usually supposed to prevail in the direction of the monsoon. On the 15th, we still experienced it, though not over fifteen miles. On the 16th, we found it setting west, and as we approached the Malayan Peninsula it was found to be running southwest.

On the 18th, we made Pulo Aor and Pulo Pedang, and arriving off the Singapore Straits, I hove-to, to await daylight. In the morning at dawn, we found ourselves in close company with a Chinese junk. The 19th, until late in the afternoon, we were in the Singapore Straits, making but slow progress towards this emporium of the East. The number of native as well as foreign vessels which we passed, proved that we were approaching some great mart, and at 5:00 p. m. we dropped our anchor in Singapore Roads. Here we found the Porpoise, Oregon, and Flying-Fish, all well: the two
former had arrived on January 22nd, nearly a month before, and the latter three days previously. Before concluding this chapter, I shall revert to their proceedings since our separation off the Sandwich Islands.

The instructions to the brigs have been heretofore given; but it may not be amiss to repeat here that the object in detaching them was, that they might explore the line of reefs and islands known to exist to the northward and westward of the Hawaiian Group, and thence continue their course towards the coast of Japan. Had they effected the latter object, it would have given important results in relation to the force of the currents, and the temperature of the water. It was desirable, if possible, to ascertain with certainty the existence on the coast of Japan of a current similar to the Gulf Stream, to which my attention had been particularly drawn.

The first land they made was on December 1, 1841, and was Necker Island. Birds, especially the white tern, had been seen in numbers prior to its announcement. Necker Island is apparently a mass of volcanic rocks, about three hundred feet high, and is destitute of any kind of vegetation, but covered with guano. It is surrounded by a reef, three miles from which soundings were obtained, in twenty fathoms water. The furious surf that was beating on all sides of the island, precluded all possibility of a landing being made. By the connected observations of the vessels it lies in longitude $164^{\circ} 37^{\prime} \mathrm{W}$., and latitude $23^{\circ} 44^{\prime} \mathrm{N}$.

The French-Frigate Shoal was seen on the 3rd; the weather proved bad, and they were unable to execute the work of examining this reef. The sea was breaking furiously upon it.

On the 7 th, the Maro Reef was made in latitude $25^{\circ} 24^{\prime} 29^{\prime \prime} \mathrm{N}$., longitude $170^{\circ} 43^{\prime} 24^{\prime \prime} \mathrm{W}$. Bottom was found at a distance of four miles from the reef, with forty-five fathoms of line. On the 8 th, they passed over the site of Neva Isle, as laid down by Arrowsmith, but no indications of land were seen.

On the 11th, Lieutenant-Commandant Ringgold determined, on account of the condition of the brigs, and the continuance of bad weather, it was impossible to keep their course to the northward and westward towards the coast of Japan; he, therefore, hauled to the southward, which was much to be regretted, and followed so very nearly in the same track as that pursued by the Vincennes, towards the China seas, that nothing new was elicited by them.

After a passage of fifty-six days from the Sandwich Islands, they dropped their anchors in Singapore on January 19, 1842, all well. Here they found the United States ship Constellation, Commodore Kearney, and the sloop of war Boston, Captain Long, forming the East India squadron.

## MANILA IN 1819*

By An American Naval Officer.

Coral.

"* * * The fine bay of Manila, thirty leagues in circumference, is situated near the middle of the west side of the island, and has good and clear anchorage in all parts of it, excepting on a coral ledge, called the Shoal of St. Nicholas, which is the only visible danger in the bay. The dangerous part of it is, however, of small extent, and with proper attention easily avoided; the least of water found on it at present is eleven feet, but its summit is constantly approaching the surface of the sea, as has been ascertained by surveys made at different periods by orders of government, which circumstance seems to indicate the presence of Zoophytes, that compound of animal and vegetable life, whose incessant and rapid labors, and, as we are told by naturalists, whose polypus-like powers of receiving perfect form and vitality into numberless dismembered portions of their bodies, have long excited much curiosity and admiration. These small, compound animals, commence their operations at the bottom of the sea, and proceed upwards, towards the surface, spreading themselves in various ramifications; the older members of the mass become concrete, petrify, and form dangerous shoals; the superior portion of these little colonists always being the last produced, in its turn generates myriads of others, and so on, ad infinitum, till they reach the surface of the ocean. These coral reefs and shoals are found in most parts of the world, within the tropics; but the waters of the eastern hemisphere seem to be peculiarly congenial to their production, and, indeed, there appear to be certain spaces or regions in these seas, which are their favorite haunts. Among many others may be mentioned the Mozambique channel, and that tract of ocean, from the eastern coast of Africa, quite across to the coast of Malabar, including the Mahé, Chagas, Maldive and Laccadive archipelagos; the southeastern part of the China sea; the Red sea; the eastern part of Java; the coasts of all the Sunda islands; and various places in the Pacific ocean. These shoals, when they begin to emerge from the sea, are frequented by aquatic fowls, whose feathers, and other deposits, combined with the fortuitous landing of drifts of wood, weeds, and various other substances from the adjacent lands, in the course of time form superaqueous banks, of considerable elevation; and the broken fragments of coral thrown up by the waves, slowly,.but constantly increase their horizontal diameter. Coconuts are frequently seen floating upon the sea in these regions, some of which are no doubt thrown upon the shores of the new created lands; from which accidental circumstance this fruit is there propagated. Vagrant birds unconsciously deposit the germs of various other productions of the vegetable kingdom, which in due season spring

[^201]up and clothe their surfaces with verdure; and the natural accumulation of dead and putrid vegetation serves to assist in the formation of a rich and productive soil, and to increase the altitudes of these new creations. As I have been always much amused and interested by this subject, and had frequent opportunities, during many years' experience, to observe and examine these shoals in their various stages of subaqueous progress, and subsequent emersion I am convinced that not only many considerable islands, but extensive insular groups, owe their existence to the above origin."
*"* * * The natives of these islands are generally well made, and bear strong marks of activity and muscular vigor; they are in general somewhat larger than the Javanese, and bear some affinity in the features of their faces to the Malays; their noses are however more prominent, and their cheek bones not so high, nor are their skins so dark. Their hair is of a jet black, made glossy by the constant application of coconut oil, as is the custom in all India, and drawn together and knotted on top, in the manner of the Malays. The women display great taste in the arrangement and decorations of their hair, which they secure with silver or gold bodkins, the heads of which are frequently composed of precious stones."
$\dagger$ "* * * A very considerable proportion of the population The people.

Mixed blood. of Manila is composed of the mestizos; they are the offspring of the intermarriages of the Spaniards with the native women, and these again forming connexions with the whites, or with the native Indians (the latter, however, less frequent), combine in stamping upon their descendants a great variety of features and shades of color; a general resemblance is, however, to be traced, and waiving color and manners, a mestizo could not easily be mistaken for a native. This class of the inhabitants is held in nearly the same estimation as the whites. They are very cleanly in their persons, and neat in their dress, which, among the males, consists generally of a pair of cotton trousers of various colors, as fancy dictates, and shoes in the European manner, a frock, or tunic, of striped grass manufacture, worn outside the trousers, in the manner of the Asiatic Armenians (but without the sash, or girdle), the collars of which are tastefully embroidered, and thrown back on their shoulders; a European hat completes their costume, which is light, cool and airy, and after a stranger has been a short time accustomed to see what he at first would call a perversion of dress, his prejudices subside, and he has no hesitation in pronouncing it very proper and graceful. They are remarkably fine limbed, and well built, the females especially, who are really models of the most complete symmetry; their hair and eyes, which unlike their skins, seldom vary from the original jet black of their native parents, bestow upon them the primary characteristics of the brunette. This people, unlike the generality of mixed colors in the human race, have been improved by their intermixture, they are more industrious and cleanly than the Spaniards, possess more intelligence and polish than

[^202]the Indians and are less malicious and revengeful than either. The men are employed mostly as writers, brokers, agents and overseers; many of them hold lucrative offices under government, and they not unfrequently arrive at wealth and consideration. The women are also industrious, and capable of great intellectual improvement; they have a natural grace and ease in their manner, and make excellent wives and mothers. This character must not, however, be taken in an unlimited sense, for we cannot expect this rule to be without its exceptions, and it is true that some of these females do degenerate, and copy after the manners of the creoles, or white natives; but this is only the case when, by their intercourse with the whites, their Indian blood is merged and lost in the European. That part of the population in which is blended the blood of the Chinese and Tagalogs is named the Chinese mestizos.

The natives are not unapt in acquiring knowledge, neither do they want industry, when efforts are made, and inducements displayed to call their powers into action. They are excellent mechanics and artisans, and, as horticulturists, their superiority over many of the Asiatics is acknowledged. They are polite and affable to strangers, but irascible, and when excited are very sanguinary; their natural bias to this revengeful and cruel character, is strengthened and rendered more intense by the . . . . . doctrines of the Roman catholic religion as dictated to them by the designing and interested priests who reside among them. The culprit always finds a sanctuary in the nearest church, till by the payment of some pecuniary mulct, he satisfies the demands of the priests, obtains absolution, appeases the resentment of the relations of the deceased, and eludes the arm of justice; he grows hardened by impunity, repeats his offences, and again escapes as before."
"* * * All the necessary works for a garrisoned city are

A Filipino foundry.

Language. within its walls; extensive magazines were erected in 1686, besides which are a hall of arms, or armory, a repository for powder, with bomb-proof vaults, and commodious quarters and barracks for the garrison. There is also a furnace and foundry here, which, although their operations were suppressed in 1805, is the most ancient in the Spanish monarchy; this establishment was founded in 1584, in the village of St. Anna, near Manila; to the latter of which places it was transferred in 1590. The first founder was a Pampango Indian, named Pandapira. When the Spaniards first arrived at Manila, in 1571, they found there a large foundry, which was accidentally burnt, in conseduence of the combustibility of the building and effects, which character applies to all the houses of that period."

* "* * * Their colloquial language, like that of the natives of Java, Borneo, Sumatra, and many other islands in these seas, is a dialect of the peninsular Malay from whence it is thought they originated; and so striking is its similarity among all these islands, that the natives of each can, in a greater or less degree, understand that of all the others. The characters of their written language differ widely, and great varieties of arrangement exist among them.

[^203]The Tagalogs write from top to bottom on palm leaves and strips of bamboo; and many of the Moros or Mahomedans use the Arabic characters."

* ،** * * From the circumstance of the Spaniards arriving in these seas by Cape Horn, and the general route being by the Cape of Good Hope, a consequent difference in time of one day is produced in the different reckoning; the Spaniards losing, and those who steer eastward gaining, each in the proportion of half a day in completing the semi-circumference of the globe. Consequently, the time at Manila, being regulated by their own reckonings, is one day later than that of those who arrive there by steering eastward from America or Europe; as for instance, when by the accounts of the latter it is Sunday, by theirs it is only Saturday.

In the year 1762 , the city of Manila was taken by the English, where, and at Cavite, immense quantities of naval and military stores, brass and iron ordnance, and several fine ships, fell into their hands. It was, however, soon delivered up to the Spaniards, on a promise of the payment to the English of four millions of dollars as a ransom, which, however, never has been paid. This breach of faith and promise has been loudly complained of by the latter, and as pertinaciously excused by the Spaniards, who complain that the British plundered the city, and committed many other excesses, contrary to the express conditions of their engagements, by which they were virtually rendered nugatory.

The inhabitants of Manila have long enjoyed the privilege of sending two annual ships to Acapulco called Galleons, Navios, or Register-Ships, with the produce of the Philippines, of China, and other parts of Asia; in return for which, they receive various articles of the production of South America; the principal of which are cochineal, merchandise of different descriptions of European origin, and silver in Spanish dollars and ingots, which compose the principal part of the value of their return cargoes, amounting annually to about three million five hundred thousand Spanish dollars. A large proportion of this property belongs to the convents in Manila, whose great revenues not only enable them to engage in extensive mercantile operations, but to lend considerable sums to the merchants on bottomry. For the indulgence in this trade, the proprietors pay a large sum of money to the crown.

These ships were of the burden of from twelve to fifteen hundred tons, and were numerously manned and well appointed for defense; but of late years, since the revolt of the Spanish colonies, which has rendered the navigation of the intermediate seas dangerous to these enterprises, the trade has been greatly interrupted, and instead of risking it in large bodies, private ships of smaller burden have been hired for the purpose of dividing the risk; some of these have been put under foreign colors, though formerly the galleons wore, by instruction, the royal flag, their officers were commissioned and uniformed like the officers of the navy, and the ships were under the same regulations and discipline. The object, how-

[^204]ever, of the trade in smaller ships has not been obtained; for so great are the fears of the owners and agents of their being captured, and so many restrictions laid upon the commanders that they lie in port the principal part of the time; so that in September, 1819, the ships of the preceding year had not arrived at Manila; neither had any been dispatched from the latter place for Acapulco during that time. These interruptions, and in fact, the virtual suspension of this commerce, will undoubtedly, if a liberal and enlightened policy is pursued, result greatly to the advantage of these islands and the mother country. Already since the establishment of the cortes, permitting foreigners to settle permanently at Manila, great improvements have been made in the productions of the island, and important additions to the revenue. The failure of the annual remittance of dollars from South America to defray the expenses of the colonial government, of which their revenues from the islands were not adequate to meet one half, has been severely felt, and has stimulated them to make some very unusual exertions. Foreign commerce has been more countenanced in consequence of this state of things, and greater encouragement has been given to the growers and manufacturers of their staple exports; and if the affairs of these islands should in future be properly conducted, the revenue arising from the impost on the single article of coffee, will in a few years be amply sufficient to support the government, and leave a net income of the revenue arising from the imposts on all other articles, besides what would accrue from the taxes and numerous other resources. A free commerce with other nations would create a competition, and a consequent reduction in the price of imports, and their articles of export would increase, in proportion to the demand for them. In short, nothing is wanting in these beautiful islands, but ability to direct, and energy to execute the most extensive plans of agriculture and commerce, which the bounties of the soil, and its excellent climate and situation, would most certainly render completely successful; and, instead of being, as at present it is, a burden to Spain, it would become a source of great wealth to her."

Spirit of
independence.

* "* * * It is to be hoped that the narrow and illiberal policy which has heretofore retarded the prosperity of these fine islands, will necessarily be superseded by more expanded views, and enable them to maintain the rank and importance to which their intrinsic worth entitles them. The spirit of independence which has recently diffused its influence through the Spanish colonies on the American continent, has also darted its rays across the Pacific, and beamed with enlivening lustre upon those remote regions and the sacred flames of liberty which have been kindled have in the bosom of that country, though for a period concealed from the view of regal parasites and dependents, burned clear and intense; and the time is perhaps not very remote, when it shall burst forth, and shed its joyous light upon the remotest and most inconsiderable islet of this archipelago.

[^205]Perhaps no part of the world offers a more eligible site for an independent republic than these islands; their insular posture and distance from any rival power, combined with the intrinsic strength of a free representative government, would guarantee their safety and glory; their intermediate situation, between Asia and the American continent, their proximity to China, Japan, Borneo, the Molucca and Sunda Islands, the Malay peninsula, Cochin China, Tonquin, Siam, and the European possessions in the East, would insure them an unbounded commerce, consequently great wealth and power; and their happiness would be secured by religious toleration and liberal views of civil liberty in the government. It must be confessed, however, that the national character of the Spaniards is not suitable to produce and enjoy in perfection this most desirable state of affairs; it is to be feared that their bigotry would preclude religious toleration, their indolence continue the present system of slavery, so degrading in a particular manner to a republic, their want of energy paralyze the operations of enterprising foreigners among them. No change, however, can be for the worse, and if all the advantage, cannot be reaped by them, which the citizens of our republic would secure, it will be better for them to seize and enjoy such as their genius and talents will enable them to."

* "* * * The health of the city and suburbs is proverbial, and the profession of a physician is, perhaps, of all others the least lucrative. A worthy and intelligent Scotch doctor, who had come to Manila, while I was there, to exercise his profession, and who lodged in the same house with me, was greatly annnoyed at the want of practice which he experienced there, although he had his full share of patronage, and often jocosely declared that the "dom climate" would starve him; in fact he did not long remain there; I afterwards met him in the Isle of France, where he was still in pursuit of practice."
$\dagger$ "* * * Impelled by a very common and, perhaps, excusable curiosity, I rode out with some friends one day to witness the execution of a mestizo soldier for murder. The parade ground of Bagumbayan was the theater of this tragic comedy, for such it may be trully called, and never did I experience such a revulsion of feeling as upon this occasion. The place was crowded with people of all descriptions, and a strong guard of soldiers, three deep, surrounded the gallows, forming a circle, the area of which was about two hundred feet in diameter. The hangman was habited in a red jacket and trousers, with a cap of the same color upon his head. This fellow had been formerly condemned to death for parricide, but was pardoned on condition of turning executioner, and becoming close prisoner for life, except when the duties of his profession occasionally called him from his dungeon for an hour. Whether his long confinement, and the ignominious estimation in which he was held, combined with despair of pardon for his heinous offense, and a natural ferocity of character, had rendered him reckless of "weal or woe," or other impulse directed his move-

[^206]Opportunity for a republir.

Health.

A barbarous execution.
ments, I know not, but never did I see such a demoniacal visage as was presented by this miscreant; and when the trembling culprit was delivered over to his hand, he pounced eagerly upon his victim, while his countenance was suffused with a grim and ghastly smile, which reminded us of Dante's devils. He immediately ascended the ladder, dragging his prey after him till they had nearly reached the top; he then placed the rope around the neck of the malefactor with many antic gestures and grimaces highly gratifying and amusing to the mob. To signify to the poor fellow under his fangs that he wished to whisper in his ear, to push him off the ladder, and to jump astride his neck with his heels drumming with violence upon his stomach, was but the work of an instant. We could then perceive a rope fast to each leg of the sufferer, which was pulled with violence by people under the gallows, and an additional rope, to use a sea term, a preventer, was round his neck, and secured to the gallows, to act in case of accident to the one by which the body was suspended. I had witnessed many executions in different parts of the world, but never had such a diabolical scene as this passed before my eyes."

# THE PEOPLING OF THE PHILIPPINES 

## By Dr. Rudolf Virchow

## (Translated by O. T. MAson; in Smithsonian Institution 1899 Report.)

Since the days when the first European navigators entered the South Sea, the dispute over the source and ethnic affiliations of the inhabitants of that extended and scattered island world has been unsettled. The most superficial glance points out a contrariety in external appearances, which leaves little doubt that here peoples of entirely different blood live near and among one another.

And this is so apparent that the pathfinder in this region, Magellan, gave expression to the contrariety in his names for tribes and islands. Since dark complexion was observed on individuals in certain tribes and in defined areas, and light complexion on others, here abundantly, there quite exceptional, writers applied Old World names to the new phenomena without further thought. The Philippines set the decisive example in this. Fernando Magellan first discovered the islands of this great archipelago in 1521, March 16. After his death the Spaniards completed the circle of his discoveries. At this time the name of Negros was fixed, which even now is called Islas de los Pintados. For years the Spaniards called the entire archipelago Islas de Poniente; gradually, after the expedition of Don Fray Garcia Jofre de Loaisa (1526), the new title of the Philippines prevailed, through Salazar.

The people were divided into two groups, the Little Negros or Negritos and the Indios. It is quite conceivable that involuntarily the opinion prevailed that the Negritos had close relationship with the African blacks, and the Indios with the lighter-complexioned inhabitants of India, or at least of Indonesia.

However, it must be said here that the theory of a truly African origin of the Negritos has been advanced but seldom, and then in a very hesitating manner. The idea that with the present configuration of the eastern island world, especially with their great distances apart, a variety of mankind that had never manifested any aptitude for maritime enterprises should have spread themselves over this vast ocean area, in order to settle down on this island and on that, is so unreasonable that it has found scarcely a defender worth naming. More and more the blacks are coming to be considered the original peoples, the "Indios" to be the intruders. For this there is a quite reasonable ground, in that on many islands the blacks dwell in the interior, difficult of access, especially in the dense and unwholesome mountain forests, while the lighter complexioned tribes have settled the coasts. To this are added linguistic proofs, which place the lighter races, of homogeneous speech, in linguistic relations with the higher races, especially the Malays. Dogmatically it has been said that originally these islands had been occupied entirely by the primitive black population, but afterwards, through intrusions from the sea, these blacks were gradually pressed away from the coast and shoved back into the interior.

The problem, though it appears simple enough, has become complicated more and more through the progress of discovery, especially since Cook enlarged our knowledge of the oriental island world. A new and still more pregnant contrast then thrust itself to the front in the fact that the blacks and the lighter-colored peoples are each separated into widely differing groups. While the former hold especially the immense, almost continental, regions of Australia (New Holland) and New Guinea, and also the larger archipelagos, such as New Hebrides, Solomon Islands, Fiji (Viti) Archipelago-that is, the western areas-the north and east, Micronesia and Polynesia, were occupied by lighter-colored peoples. So the first division into Melanesia and Polynesia has in latest times come to be of value, and the dogma once fixed has remained. For the Polynesians are by many allied to the Malays, while the blacks are put together as a special ethnological race.

For practical ethnology this division may suffice. But the scientific man will seek also for the blacks a genetic explanation. The answer has been furnished by one of the greatest ethnologists, Theodor Waitz, who, after he had exposed the insufficiency of the accepted formulas, came to the conclusion that the differentiation of the blacks from the lighter peoples might be an error. He denied that there had been a primitive black race in Micronesia and Polynesia; in his opinion we have here to do with a single race. The color of the Polynesians may be out and out from natural causes different, "their entire physical appearance indica'ces the greatest variability." Herein the whole question of the domain of variation is sprung with imperfect satisfaction on the part of those travelers who give their attention more to transitions than to types. Among these are not a few who have returned from the South Sea with the conviction that all criteria for the diagnosis of men and of races are valueless.

Analytical anthropology has led to other and often unexpected results. It has proved that just that portion of South Sea population

Complicated
Pacific problem.

Hair as a race index.
which can apparently lay the strongest claim to be considered a homogeneous race must be separated into a collection of subvarieties. Nothing appears more likely than that the Negritos of the Philippines are the nearest relatives to the Melanesians, the Australians, the Papuans; and yet it has been proved that all these are separated one from another by well-marked characters. Whether these characters place the peoples under the head of varieties, or whether, indeed, the black tribes of the South Sea, spite of all differences, are to be traced back to one single primitive stock, that is a question of prehistory for whose answer the material is lacking. Were it possible to furnish the proof that the black populations of the South Sea were already settled in their present homes when land bridges existed between their territory and Africa, or when the muchsought Lemuria still existed, it would not be worth the trouble to hunt for the missing material. In our present knowledge we can not fill the gaps, so we must yet hold the blacks of the Orient to be separate races.

The hair furnished the strongest character for diagnosis, in which, not alone that of the head is under consideration; the hair, therefore, occupies the foreground of interest. Its color is of the least importance, since all peoples of the South Sea have black hair. It is more the structure and appearance which furnish the observer convenient starting points for the primary classification. Generally atwo-fold division satisfies. The blacks, it is said, have crisped hair, the Polynesians and light-colored peoples have smooth hair. But this declaration is erroneous in its generality. It is in no way easy to declare absolutely what hair is to be called crisp, and it is still more difficult to define in what respects the so-called crisp varieties differ one from another. For a long time the Australian hair was denominated crisp, until it was evident that it could be classed neither with that of the Africans nor with that of the Philippine blacks. Semper, one of the first travelers to furnish a somewhat complete description of the physical characters of the Negritos, describes it as an "extremely thick, brown-black, lack-luster, and crisp-woolly crown of hair." Among these peculiarities the lackluster is unimportant, since it is due to want of care and uncleanliness. On the contrary, the other data furnish true characters of the hair and among them the crisp-woolly peculiarity is most valuable.

On the terms "wool" and "woolly" severe controversies, which have not yet closed, have taken place among ethnologists during the last ten years. Also the lack of care, especially the absence of the comb, has here acted as a disturbing cause in the decision. But there is yet a set of peoples, which were formerly included, that are now being gradually disassociated, especially the Australians and the Veddahs, whose hair, by means of special care, appears quite wavy if not entirely sleek and smooth. Generally it is frowzy and matted, so that its natural form is difficult to recognize. To it is wanting the chief peculiarity, which obtrudes itself in the African blacks so characteristically that the compact spiral form which it assumes from its root, the so-called "pepper-corn," is selected as the preferable mark of the race. The peculiar nappy head has it origin in the
spiral "rollchen." As to the Asiatic blacks this has been for a long time known among the Andamanese; it has lately been noticed upon the Sakai of Malacca, and it is to be found also among the Negritos of the Philippines, as I can show by specimens. Therefore, if we seek ethnic relationships for the Negritos of the Philippines, or as they are named, the Aetas (Etas, Itas), such connections obtrude themselves with the stocks named, and the more strongly since they all have brachycephalic, relatively small (nannocephalic) heads and through their small size attach themselves to the peculiar dwarf tribes.
I might here comment on the singular fact that the Andaman Islands are situated near the Nicobars in the Indian Ocean, but that the populations on both sides of them are entirely different. In my own detailed descriptions which treat of the skulls and the hair specially, it is affirmed that the typical skull shape of the Nicobarese is dolichocephalic and that "their hair stands between the straight hair of the Mongoloid and the sleek, though slightly curved or wavy, hair of the Malayan and Indian peoples;" their skin color is relatively dark, but only so much so as is peculiar to the tribes of India. With the little blacks of the Andamans there is not the slightest agreement. In this we have one of the best evidences against the theory of Waitz-Gerland that the differences in physical appearance are to be attributed to variation merely. I will, however, so as not to be misunderstood, expressly emphasize that I am not willing to declare that the two peoples have been at all times so constituted; I am now speaking of actual conditions.
In the same sense I wish also my remarks concerning the Negritos to be taken. Not one fact is in evidence from which we may conclude that a single neighboring people known to us has been Negritized. We are therefore justified when we see in the Negritos a truly primitive people. As they are now, they were more than three hundred and fifty years ago when the first European navigators visited these islands. About older relationships nothing is known. All the graves from which the bones of Negritos now in possession were taken belong to recent times, and also the oldest descriptions which have been received, so far as phylogeny is concerned, must be characterized as modern.
The little change in the mode of life made known through these descriptions in connection with the low grade of culture on which these impoverished tribes live amply testify that we have before us here a primitive race. * * *
(The question whether we have to do with older, independent races in the Malay Archipelago or with mixtures is everywhere an open one.-Translator.)

Whoever would picture the present ethnic affiliations of the light-colored peoples of the Philippines will soon land in confusion on account of the great number of tribes. One of the ablest observers, Ferd. Blumentritt, mentions, besides the Negritos, the Chinese and the whites, not less than 51 such tribes. He classifies them in one group as Malays, according to the plan now customary. The division rests primarily on a linguistic foundation. But when it is noted that the identity of language among all the tribes is not

Negritos a primitive people.

Theory of
Negrito and
three Malay
invasions.
established and among many not at all proved, it is sufficiently shown that speech is a character of little constancy, and that a language may be imposed upon a people to the annihilation of their own by those who belong to a different linguistic stock. The Malay Sea is filled with islands on which tarry the remnants of peoples not Malay.

For a long time, especially since the Dutch occupation, these old populations have received the special name of Alfuros. But this ambiguous term has been used in such an arbitrary and promiscuous fashion that latterly it has been well-nigh banished from ethnological literature. It is not long ago that the Negritos were so called. But if the black peoples are eliminated, there remains on many islands at least an element to be differentiated from the Malay, chiefly through the darker skin color, greater orthocephaly, and more wavy, quite crimped hair. I have, for the different islands, furnished proof, and will here only refer to the assertion that "a broad belt of wavy and curly hair has pressed itself in between the Papuan and the Malay, a belt which in the north seems to terminate with the Veddah, in the south with the Australian." One can not read the accounts of travelers without the increasing conviction of the existence of several different, if not perhaps related, varieties of peoples thrust on the same island.

From this results the natural and entirely unprejudiced conclusion, which has repeatedly been stated, that either a primitive people by later intrusions has been pressed back into the interior or that in course of time several immigrations have followed one another. At the same time it is not unreasonable to think that both processes went on at the same time, and indeed this conception is strongly brought forward. So Blumentritt assumes that there is there a primitive black people and that three separate Malay invasions have taken place. The oldest, whose branches have many traits in accord with the Dayaks of Borneo, especially the practice of head-hunting; a second, which also took place before the arrival of the Spaniards, to which the Tagals, Bisayas, Bicols, Ilocanos, and other tribes belong; the third, Islamitic, which emigrated from Borneo and might have been interrupted by the arrival of the Spaniards, and with which a contemporaneous immigration from the Moluccas went on. It must be said, however, that Blumentritt admits two periods for the first invasion. In the earliest he places the immigration of the Igorots, Apayos, Zambales - in short, all the tribes that dwelt in the interior of the country later and were pressed away from the coast, therefore, actually, the mountain tribes. To the second half he assigns the Tinguianes, Catalanganes, and Irayas, who are not head-hunters, but Semper says they appear to have a mixture of Chinese and Japanese blood.

Against this scheme many things may be said in detail, especially that, according to the apparently well-grounded assertions of MuellerBeeck, the going of the Chinese to the Fhilippines was developed about the end of the fourteenth century, and chiefly after the Spaniards had gotten a foothold and were using the Mexican silver in trade. At any rate, the apprehension of Semper, which rests on somewhat superficial physiognomic ground, is not confirmed by
searching investigations. So the head-hunting of the mountain tribes, so far as it hints at relations with Borneo, gives no sure chronological result, since it might have been contemporaneous in them and could have come here through invasion from other islands.

The chief inquiry is this: Whether there took place other and older invasions. For this we are not only to draw upon the present tribes, but if possible upon the remains of earlier and perhaps now extinct tribes. This possibility has been brought nearer for the Philippines through certain cave deposits. We have to thank, for the first information, the traveler Jagor, whose exceptional talent as collector has placed us in the possession of rich material, especially crania. To his excellent report of his journey I have already dedicated a special chapter, in which I have presented and partially illustrated not only the cave crania, but also a series of other skulls. An extended conference upon them has been held in the Anthropological Society.

The old Spanish chroniclers describe accurately the mortuary customs which were in vogue in their time. The dead were laid in coffins made from excavated tree trunks and covered with a wellfitting lid. They were then deposited on some elevated place, or mountair, or river bank, or seashore. Caves in the mountains were also utilized for this purpose. Jagor describes such caves on the island of Samar, west of Luzon, whose contents have recently been annihilated.

The few crania from there which have been intrusted to me bear the marks of recent pedigree, as also do the additional objects. Unfortunately, Dr. Jagor did not himself visit these interesting caves, but he has brought crania thence which are of the highest interest, and which I must now mention.
The cave in question lies near Lanang, on the east coast of Samar, on the bank of a river, it is said. It is, as the traveler reports, celebrated in the locality "on account of its depressed gigantic crania, without sutures." The singular statement is made clear by means of a well-preserved example, which I lay before you. The entire cranium, including the face, is covered with a thick layer of sinter, which gives it the appearance of belonging to the class of skulls with Leontiasis ossea. It is, in fact, of good size, but through the incrustation it is increased to gigantic proportions. It is true, likewise, that it has a much flattened, broad and compressed form. The cleaning of another skull has shown that artificial deformation has taken place, which obviously was completed before the incrustation was laid on by the mineral water of the cave. I will here add that on the testimony of travelers no Negritos were on Samar. The island lies in the neighborhood of the Bisayas. Although no description of the position of the skull is at hand and of the skeleton to which it apparently belonged, it must be assumed that the dead man was not laid away in a coffin, but placed on the ground; that, in fact, he belonged to an earlier "period." How long ago that was can not be known, unfortunately, since no data are at hand; however, the bones are in a nearly fossilized condition, which allows the conclusion that they were deposited long ago.

The deformation itself furnishes no clue to a chronological conclusion. In Thévenot is found the statement that, according to the account of a priest, probably in the 16th century, the custom prevails in some of the islands to press the heads of new-born babes between two boards, also to flatten the forehead, "since they believed that this form was a special mark of beauty." A similar deformation, with more pronounced flattening and backward pressure of the forehead, is shown on the crania which Jagor produced from a cave at Caramuan in Luzon. There are modes of flattening which remind one of Peru. When they came into our hands it was indeed an immense surprise, since no knowledge of such deformation in the South Sea was at hand. First our information led to more thorough investigations; so we are aware of several examples of it from Indonesia and, indeed, from the South Sea (Mallicolo). However, this deformation furnishes no clue to the antiquity of the graves.
(Chinese and Korean pottery are said to have been found with the deformed crania. Similar deformations exist in the Celebes, New Britain, etc. Head-shaping has been universal, cf. A. B. Meyer, Ueber Kunstliche deformirte Schaedel von Borneo und Mindanao and ueber die Verbreitung der Sitte der Kunstlichen Schaedeldeformirung, 1881, 36 pp., 4. -Translator.)

I have sawed one of these skulls in two along the sagittal suture. The illustration gives a good idea of the amount of compression and of the violence which this skull endured when quite young. The cranial cavity is inclined backward and lengthened, and curves out above, while the occiput is pressed downward and the region of the front fontanelle is correspondingly lacking. Likewise, a considerable thickness of the bone is to be noted, especially of the vertex. The upper jaw is slightly prognathous and the roof of the mouth unusually arched.
For the purpose of the present study, it is unnecessary to go further into particulars. It might be mentioned that all Lanang skulls are characterized by their size and the firmness of bone, so that they depart widely from the characteristics of the other Philippine examples known to me. Similar skulls have been received only from caves, which exist in one of the little rocky islands east from Luzon. They suggest most Kanaka crania from Hawaii, and Moriori crania from Chatham islands, and they raise the question whether they do not belong to a migration period long before the time of the Malays. I have, on various occasions, mentioned this probable pre-Malayan, or at least proto-Malayan, population which stands in nearest relation to the settling of Polynesia. Here I will merely mention that the Polynesian sagas bring the progenitor from the west, and that the passage between Halmahera (Gilolo) and the Philippines is pointed out as the course of invasion.

At any rate, it is quite probable that the skulls from Lanang, Cragaray, and other Philippine Islands are the remains of a very old, if not autochthonous, prehistoric layer of population. The present mountain tribes have furnished no close analogies. As to the Igorots, which Blumentritt attributes to the first invasion, I refer to my description given on the ground of chronological investigations; according to the account given by Hans Meyer the disposal of the
dead in $\log$ coffins and in caves still goes on. Of the skulls themselves, none were brachycephalous; on the contrary, they exhibit platyrrhine and in part decidedly pithecoid noses. On the whole, I came to the conclusion, as did earlier Quatrefages and Hamy, that "they stand next in comparison with the Dayaks of Borneo," but I hold yet the impression that they belong to a very old, probably pre-Malay, immigration.

When, on the 18th of March, 1897, I made a communication on the population of the Philippines, a bloody uprising had broken out everywhere against the existing Spanish rule. In this uprising a certain portion of the population, and indeed that which had the most valid claim to aboriginality, the so-called Negritos, were not involved. Their isolation, their lack of every sort of political, often indeed of village organization, also their meager numbers, render it conceivable that the greatest changes might go on among their neighbors without their taking such a practical view of them as to lead to their engaging in them. Thus it can be understood how they would take no interest in the further development of the affair.

Since then the result of the war between Spain and the Americans has been the destruction of Spanish power, and the treaty of Paris brought the entire Philippine Archipelago into the possession of the United States of America. Henceforth the principal interest is centered upon the deportment of the insurgents, who have not only outlived the great war between the powers, but are now determined to assert, or win, their independence from the conquerors. These insurgents, who for brevity are called Filipinos, belong, as I have remarked, to the light-colored race of so-called Indios, who are sharply differentiated from the Negritos. Their ethnological position is difficult to fix, since numerous mixtures have taken place with immigrant whites, especially with Spaniards, but also with people of yellow and of brown races-that is, with Mongols and Chinese. Perhaps here and there the importance of this mixture on the composite type of the Indios has been overestimated; at least in most places positive proof is not forthcoming that foreign blood has imposed itself upon the bright-colored population. Both history and tradition teach, on the contrary, as also the study of the physical peculiarities of the people that among the various tribes differences exist which suggest family traits. To this effect is the testimony of several travelers who have followed one another during a long period of time, as has been developed especially by Blumentritt.

In this connection it must not be overlooked that all these immigrations, howsoever many they be"supposed to have been, must have come this way from the west. Indeed, a noteworthy migration from the east is entirely barred out, if we look no farther back than the Chinese and Japanese. On the contrary, all signs point to the assumption that from of old, long before the coming of Portuguese and Spaniards, a strong movement had gone on from this region to the east, and that the great sea way which exists between Mindanao and the Sulu islands on the north and Halmahera and the Moluccas in the south was the entrance road along which those tribes, or at least those navigators whose arrival peopled the Polynesian Islands, found their way into the Pacific Ocean. But also the movement ofthe

## Indications of

pre-Malay invasion.

Polynesians points to the west, and if their ancestors may have come from Indonesia there is no doubt that in their long journeys eastward they must have touched at the coasts of other islands on their way, especially the Philippines. Polynesian invasions of the Philippines are not supposed to have closed when a migration of peoples or of men passing out to the Pacific Ocean laid the foundation of a large fraction of the population of the archipelago. It is known that now and then single canoes from the Pelew or the Ladrone Islands were driven upon the east coast of Luzon, but their importance ought not to be overestimated. The migration this way from the west must henceforth remain as the point of departure for all explanations of this eastern ethnology. (These statements are well enough for working hypotheses, but actual proofs are not at hand. Ratzel, Berl. Verhandl., etc., Phil. Hist. Class, 1898, I., p. 33.-Translator.)

Now, how are the local differences of various tribes to be explained, when on the whole the place of origin was the same? Is there here a secondary variation of the type, something brought about through climate, food, circumstances? It is a large theme, which, unfortunately, is too often dominated by previously-formed theories. The importance of "environment" and mode of life upon the corporeal development of man can not be contested, but the measure of this importance is very much in doubt. Nowhere is this measure, at least in the present consideration, less known than in the Philippines. In spite of wide geological and biological differences on these islands, there exists a close anthropological agreement of the Indios in the chief characteristics, and the effort to trace back the tribal differences that have been marked to climatic and alimentary causes has not succeeded. The influence of inherited peculiarities is also more mighty here, as in most parts of the earth, than that of "milieu."

If we assume, first, that the immigrants brought their peculiarities with them, which were fixed already when they came, we must also accept as self-evident that the Negritos of the Philippines do not belong to the same stock as the more powerful, bright-colored Indios. As long as these islands have been known, more than three centuries, the skin of the Negritos has been dark brown, almost black, their hair short and spirally twisted, and just as long has the skin of the Indios been brownish, in various shades, relatively clear, and the hair has been long and arranged in wavy locks. At no time, so far as known, has it been discovered that among a single family a pronounced variation from these peculiarities had taken place. On this point there is entire unanimity. In case of the Negritos there is not the least doubt; of the Indios a doubt may arise, for, in fact, the shades of skin color appear greatly varied, since the brown is at times quite blackish, at times yellowish, almost as varied as is the color of the sunburnt hair. But even then the practiced eye easily detects the descent, and if the skin alone is not sufficient the first glance at the hair completes the diagnosis. The correct explanation of individual or tribal variations is difficult only with the Indios, while no such necessity exists in the case of the Negritos. But among the Indios these individual and tribal variations are so frequent and so outspoken that one is justified in making the inquiry whether
there has not developed here a new type of inherited peculiarities. If this were the case, it must still be held that already the immigrant tribes had possessed them.

Now, history records that different immigrations have actually taken place. Laying aside the latest before the arrival of the Spaniards, that of the Islamites, in the fourteenth and the fifteenth centuries, there remains the older one. If ethnologists and travelers in general come to the conclusion concerning Borneo-and it is to be taken as certain-that the differences now existing among the wild tribes of this island are very old, it ought not be thought so wonderful if, according to the conditions of the tribes which have immigrated thence, there should exist on the Philippines near one another dissimilar though related peoples. This difference is not difficult to recognize in manners and customs-a side of the discussion which is further on to be treated more fully. We begin with physical characteristics.

Among these the hair occupies the chief place. To be sure, among all the Indios it is black, but it shows not the slightest approach to the frizzled condition which is such a prominent feature in the external appearance of the Negritos and of all the Papuan tribes of the East. This frizzled condition may be called woolly, or in somewhat exaggerated refinement in the name may be attributed to the term "wool," all sorts of meanings akin to wool; in every case there is wanting to all the Indios the crinkling of the hair from its exit out of the follicle, whereby would result wide or narrow spiral tubes and the coarse appearance of the so-called "peppercorn." The hair of all Indios is smooth and straightened out, and when it forms curves they are only feeble, and they make the whole outward appearance wavy or, at most, curled.

But within this wavy or curled condition of the hair there are again differences. In my former communication I have attended to examinations which I mede upon a large number of islands in the Malay Sea, and in which it was shown that a certain area exists which begins with the Moluccas and extends to the Sunda group, in which the hair shows a strong inclination to form wavy locks, indeed passes gradually into crinkled, if not into spiral, rolls. Such hair is found specially in the interior of the islands, where the so-called aboriginal population is purer and where for a long time the name of Alfuros has been conferred on them. On most points affinity with Negritos or Papuans is not to be recognized. Should such at any time have existed, we are a long way from the period when the direct causes therefor are to be looked for. In this connection the study of the Philippines is rich with instruction. In the limits of the almost insular, isolated Negrito enclave, mixtures between Negritos and Indios very seldom surprise one, and never the transitions that can have arisen in the post-generative time of development. (The island of Negros, on the contrary, is peopled by such crossbreeds.-Translator.)

If there are among the bright-colored islanders of the Indian Ocean Alfuros and Malays close together there is nothing against coming upon this contrast in the Philippine population also. Among the more central peoples the tribal differences are so great that almost

Assistance from history.

## Hair

differences.

Ancestor worship.

Tattooing.
every explorer stumbles on the question of mixture. There not only the Dayaks and the other Malays obtrude themselves, but also the Chinese and the Mongolian peoples of Farther India. Indeed, many facts are known, chiefly in the language, the religion, the domestic arts, the agriculture, the pastoral life which remind one of known conditions peculiarly Indian. The results of the ethnologists are so tangled here that one has to be cautious when one or another of them draws conclusions concerning immigrations, because of certain local or territorial specializations. Of course, when a Brahmanic custom occurs anywhere it is right to conclude that it came here from India. But before assuming that the tribe in which such a custom prevails itself comes from Hither or Farther India, the time has to be ascertained to which the custom is to be traced back. The chronological evidence leads to the confident belief that the custom and the tribe immigrated together.

Over the whole Philippine Archipelago religious customs have changed with the progress of external relations. Christianity has in many places spread its peculiar customs, observances, and opinions, and changed entirely the direction of thought. On closer view are to be detected in the midst of Christian activities older survivals, as ingredients of belief which, in spite of that religion, have not vanished. Before Christianity, in many places, Islam flourished, and it is not surprising to witness, as on Mindanao, Christian and Mohammedan beliefs side by side. But, before Islam, ancestor worship, as has long been known, was widely prevalent. In almost every locality, every hut has its Anito with its special place, its own dwelling; there are Anito pictures and images, certain trees and, indeed, certain animals in which some Anito resides. The ancestor worship is as old as history, for the discoverers of the Philippines found it in full bloom, and rightly has Blumentritt characterized Anito worship as the ground form of Philippine religion. He has also furnished numerous examples of Anito cult surviving in Christian communities.

Chronology has a good groundwork and it will have to observe every footprint of vanishing creeds. Only, it must not be overlooked that the beginning of the chronology of religion has not been reached, and that the origin of the generally diffused ancestor worship, at least on the Philippines, is not known. If it is borne in mind that belief in Anitos is widely diffused in Polynesia and in purely Malay areas, the drawing of certain conclusions therefrom concerning the prehistory of the Philippines is to be despaired of.

Next to religious customs, among wild tribes fashions are most enduring. Little of costume is to be seen, indeed, among them. Therefore, here tattooing asserts its sway. The more it has been studied in late years the more valuable has been the information in deciding the kinship relations of tribes. Unfortunately, in the Philippines the greater part of the early tattoo designs have been lost and the art itself is also nearly eliminated. But since the journey of Carl Semper it has been known that not only Malays but also Negritos tattoo; indeed, this admirable explorer has decided that the "Negroes of the East Coast" practice a different method of tattooing from that of the Mariveles in the west, and on that account they
attain different results. In the one case a needle is employed to make fine holes in the skin in which to introduce the color; in the other long gashes are made. In the latter case prominent scars result; in the former a smooth pattern. But these combined patterns are on the whole the same, instead of rectilinear figures. Schadenburg has the operations commence with a sharpened bamboo on children 10 years of age. Among the wild tribes of the light-colored population tattooing is not less diffused, but the patterns are not alike in the different tribes. Isabelo de los Reyes reports that the Tinguianes, who inhabit the mountain forests of the northern cordilleras of Luzon, produce figures of stars, snakes, birds, etc., on children 7 to 9 years old. Hans Meyer describes the pattern of the Igorots. There appears to exist a great variety of symbols; for example, on the arms, straight and crooked lines crossing one another; on the breast, feather-like patterns. Least frequently he saw the so-called Burik designs, which extended in parallel bands across the breast, the back, and calves, and give to the body the appearance of a sailor's striped jacket. It is very remarkable that the human form never occurs.

What is true concerning tattooing on so many Polynesian islands holds also completely here. But reliable descriptions are so few, and especially there is such a meager number of useful drawings, that it would not repay the trouble to assemble the scattered data. At least it will suffice to discover whether among them there are genuine tribal marks or to investigate concerning the distribution of separate patterns. Those known show conclusively that in the matter of tattooing the Filipinos are not differentiated from the islanders of the Pacific; they form, moreover, an important link in the chain of knowledge which demonstrates the genetic homogeneity of the inhabitants. The tattooings of the eastern islanders are comparable only to those of African aborigines, with which last they furnish many family marks, made out and recognized. It is desirable that a trustworthy collection of all patterns be collected before the method becomes more altered or destroyed.

Next to the skin, among the wild tribes the teeth are modified in the most numerous artificial alterations. The preferable custom, common in Africa, of breaking out the front teeth in greater or less number has not, so far as I remember, been described among the Filipinos; I only mention that while I was making a revision of our Philippine crania, two of them turned up in which the middle upper incisors had evidently been broken out for a long time, for the alveolar border had shrunk into a small quite smooth ridge, without a trace of an aveolus. It is otherwise with the pointing of the incisors, especially the upper ones, which, also is not common. I must leave it undecided whether the sharpening is done by filing or by breaking off pieces from the sides. The latter should be in general far more frequent. In every case the otherwise broad and flat teeth are brought to such sharp points as to project like those of the carnivorous animals. I have met with this condition several times on Negrito skulls and furnished illustrations of them. On a Zambal skull, excavated by Dr. A. B. Meyer and which I lay before you, the deformation is easy to be seen. I called attention at the time to

Teeth a'terations
the fact that among the Malays an entirely different method of modifying the teeth is in vogue, in which a horizontal filing on the front surface is practiced and the sharp lower edge is straightened and widened. Already the elder Thévenot has accented this contrast when he says:
"These cause the teeth to be equal, those file them to points, giving them the shape of a saw."

This difference appears to have held on till the present; at least no skull of an Indio is known to me with similar deformation of the teeth. This custom of the Negritos is so much more remarkable since the chipping of the corners of the teeth is widely spread among the African blacks.

The other part of the body used most for deformation-the skullis in strong contrast to the last-named custom. Deformed crania; especially from older times, are quite numerous in the Philippines; probably they belong exclusively to the Indios. If they exist among the Negritos, I do not know it; the only exception comes from the Tinguianes, of whom I. de los Reyes reports their skulls are flattened behind (por detrás oprimido). Such flattening is found, however, not seldom among tribes who have the practice of binding children on hard cradle boards-chiefly among those families who keep their infants a long time on such contrivances. A sure mark by which to discriminate accidental pressure of this sort from one intentionally produced is not at hand; it may be that in accidental deformation oblique position of the deformed spot is more frequent; at any rate, the difference in the Philippines is a very striking one, since there not so much the occiput as the front and middle portions suffer from the disfigurements, and thereby deformations are produced that have had their most perfect expression among the ancient Peruvians and other American tribes.

I have discussed cranial deformation of the Americans in greater detail, where I exhibit the accidental and the artificial (intentional) deformation in their principal forms. The result is that in large sections of America scarcely any ancient skulls are found having their natural forms, but that the practice of deformation has not been general; moreover, a number of deformation centers may be differentiated which stand in no direct association with one another. The Peruvian center is far removed from that of the northwest coast, and this again from that of the Gulf States. From this it must not be said that each center may have had its own, as it were, autochthonous origin. But the method has not so spread that its course can be followed immediately. Rather is the supposition confirmed that the method is to be traced to some other time, therefore that somewhere there must have been a place of origin for it. On the Eastern Hemisphere, and especially in the region here under consideration, the relations are apparently otherwise. Here exist, so far as known, great areas entirely free from deformation; small ones, on the other hand, full of it. There are here, also, deformation centers, but only a few. Among these, with our present knowledge, the Philippines occupy the first place.

The knowledge of this, indeed, is not of long duration. Public attention was first aroused about thirty years ago concerning skulls
from Samar and Luzon, gathered by F. Jagor from ancient caves, to furnish the proof of their deformation. Up to that time next to nothing was known of deformed crania in the oriental island world. First through my publication the attention of J. G. Riedel, a most observant Dutch resident, was called to the fact that cranial deformation is still practiced in the Celebes, and he was so good as to send us a specimen of the compressing apparatus for delicate infants (1874). Compressed crania were also found. But the number was small and the compression of the separate specimens was only slight. In both respects what was observed in the Sunda islands did not differ from the state of the case in the Philippines. Through Jagor's collections different places had become known where deformed crania were buried. Since then the number of localities has multiplied. I shall mention only two, on account of their peculiar locality. One is Cagraray, a small island east of Luzon, in the Pacific Ocean, at the entrance of the Bay of Albay; the other, the island of Marinduque, in the west, between Luzon and Mindoro. From the last-named island I saw, ten years ago, the first picture of one in a photograph album accidentally placed in my hands. Since then I had opportunity to examine the Schadenberg collection of crania, lately come into the possession of the Reichsmuseum, in Leyden, and to my great delight discovered in it a series of skulls which are compressed in exactly the same fashion as those of Lanang. It is said that these will soon be described in a publication.

It is of especial interest that this method has been noted in the Philippines for more than three hundred years. In my first publication I cited a passage in Thévenot where he says, on the testimony of a priest, that the natives on some islands had the custom of compressing the head of a newborn child between two boards, so that it would be no longer round, but lengthened out; also they flattened the forehead, which they looked upon as a special mark of beauty. This is, therefore, an ancient example. It is confirmed by the circumstance that these crania are found especially in caves, from the roofs of which mineral waters have dripped, which have overlaid the bones partly with a thick layer of calcareous matter. The bones themselves have an uncommonly thick, almost ivory, fossil-like appearance. Only the outer surface is in places corroded, and on these places saturated with a greenish infiltration. It is to be assumed, therefore, that they are very old. I have the impression that they must have been placed here before the discovery of the islands and the introduction of Christianity. Their peculiar appearance, especially their angular form and the thickness of the bone, reminds one of crania from other parts of the South Sea, especially those from Chatham and Sandwich Islands. I shall not here go further into this question, but merely mention that I came to the conclusion that these people must be looked upon as protoMalayan.

The changes which will take place in the political condition of the Philippines may be of little service to scientific explorations at first; but the study of the population will be surely taken up with renewed

Hope of Filipino and American study. energy. Already in America scholars have begun to occupy themselves therewith. A brief article by Dr. Brinton is to be mentioned

Comparison of
Indio and
Negrito skulls
as the first sign of this. But should the ardent desire of the Filipinos be realized, that their islands hould have political autonomy, it is to be hoped that, out of the patriotic enthusiasm of the population and the scientific spirit of many of their best men, new sources of information will be opened for the history and the development of oriental peoples. To this end it may be here mentioned, by the way, that the connecting links of ancient Philippine history and the customs of these islands, as well with the Melanesians as with the Polynesians of the south, are yet to be discovered.

As representatives of these two groups, I present, in closing, two especially well-formed crania from the Philippines. One of them, which shows the marks of antiquity that I have set forth, belongs to an "Indio." It has the high cranial capacity of 1,540 cubic centimeters, a horizontal circumference of 525 millimeters, and a sagittacircumference of 386 millimeters; its form is hypsidolicho, quite on the border of mesocephaly: Index of width, 75.3; index of height, 76.3. Besides, it has the appearance of a race capable of development; only, the nose is platyrrhine (index, 52.3), as among so many Malay tribes, and in the left temple it bears a Processus frontalis squamae temporalis developed partly from an enlarged fontanelle. The other skull was one taken from a Negrito grave of Zambales by Dr. A. B. Meyer. It makes, at first glance, just as favorable an impression, but its capacity is only 1,182 cubic centimeters; therefore 358 cubic centimeters less than the other. Its form is orthobrachycephalic; breadth index, 80.2; height index, 70.6. As in single traits of development, so in the measurements, the difference and the debased character of this race obtrude themselves. Only, the nasal index is somewhat smaller; on the whole, the nose has in its separate parts a decidedly pithecoid form.

## PEOPLE AND PROSPECTS OF THE PHILIPPINES

Blackwood's magazine for August, 1818, has an account of conditions in Manila and the Philippines from data given by an English merchant who left the Islands in 1798 after twenty years' residence in which he accumulated a fortune.
"Your first question, with respect to the Spanish population, must refer to native Spaniards only; as their numerous descendants, through all the variety of half-castes, would include one third at least of the whole population of Luconia (i. e., Luzon-A. C.)
"Of native Spaniards, accordingly, settled in the Philippine Islands, the total number may be stated at 2,000 not military. The military, including all descriptions, men and officers, are about 2,500 , out of which number the native regiments are office.ed.

These last, in 1796-7, were almost entirely composed of South Americans and were reckoned at 5,000 men, making a military force of about 7,500.
"The castes bearing a mixture of the Spanish blood are in Luconia alone at least 200,000 . The Sangleys, or Chinese descendants, are upwards of 20,000 , and Indians, who call themselves the original Tagalas, about 340,000 , making a total population in that island of about 600,000 souls. What may be the respective numbers in the other Philippine Islands I never had any opportunity of learning."
(This opinion, of a day when it was not desired to disparage the people, gives an idea of the mixed blood of the Filipinos which, in the opinion of the ethnologists, like Ratzel, is a source of strength. It classes them with the English and Americans. One danger of the present appears in over-emphasizing the Malay blood, just as in Spanish times a real loss seems to have come from the contempt toward the Chinese which led to minimizing and concealing a most creditable ancestry.

Prejudice in the past called all trouble makers mestizos, but today's study is showing that trouble maker meant man who would stand up for his rights; one must not forget that mestizo was used as a reproach, that the leaders of the people were really typical of the people. By the old injustice those who were mediocre were called natives and whoever rose above his fellows was claimed as a Spaniard, but a fairer way would seem to be to consider Filipinos all born in the Philippines.-C.).

The Cornhill magazine in the late '70s had a contribution by the then British Consul, Mr. Palgreave, on "Malay Life in the Philippines," that makes more understandable the reputation of the islands, which before the opening of the Suez were a health resort for Japan, the China coast and India. It also shows a fairness to the people uncommon in the Spanish-inspired writings of his day.
"Dull indeed must be his soul, unsympathetic his nature who can see the forests and mountains of Luzon, Queen of the Eastern Isles, fade away into dim violet outlines on the fast receding horizon without some pang of longing regret. Not the Aegean, not the West Indian, not the Samoan, not any rival in manifold beauties of earth, sea and sky the Philippine Archipelago. Pity that for the Philippines no word limner of note exists. The chiefest, the almost exceptional spell of the Philippines, is situated, not in the lake or volcano, forest or plain, but in the races that form the bulk of the island population.
"I said 'almost exceptional' because rarely is an intra-tropical people a satisfactory one to eye or mind. But this cannot be said of the Philippine Malays who is bodily formation and mental characteristics alike, may fairly claim a place, not among middling ones merely, but among almost the higher names inscribed on the world's
national scale. A concentrated, never-absent self-respect, an habitual self-restraint in word and deed, very rarely broken except when extreme provocation induces the transitory but fatal frenzy known as 'amok,' and an inbred courtesy, equally diffused through all classes, high or low, unfailing decorum, prudence, caution, quiet cheerfulness, ready hospitality and a correct, though not inventive taste. His family is a pleasing sight, much subordination and little constraint, unison in gradation, liberty-not license. Orderly childiren, respected parents, women subject but not oppressed, men ruling but not despotic, reverence with kindness, obedience in affection, these form lovable pictures, not by any means rare in the villages of the eastern isles." (Here again comes the necessity of combatting the popular impression that the Philippines is a tropical land peopled by Malays. The modification of climate from being an ocean archipelago suggests that these islands are really subtropical, while mixture of blood joined with three centuries of European civilization makes the term Malay misleading.-C.)

## FILIPINO MERCHANTS OF THE EARLY 1890s

F. Karuth, F. R. G. S., (President of an English corporation interested in Philippine mining) about 1894, wrote:
"Few outside the comparatively narrow circle who are directly interested in the commerce and resources of the Philippine Islands know anything about them. The Philippine merchants are a rather close community which only in the last decade or so has expanded its diameter a little. There are a number of very old established firms amongst them, several of them being British.
Amongst them also are firms-perhaps as far as wealth and local influence go, the most important firms-whose chiefs are partly at least of nalive blood.

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[^0]:    PHILIPPINE EDUCATION CO., INC., MANILA, 1916

[^1]:    * New York noon is Manila 1:04 next morning.-C.
    $\dagger$ Navarrete, IV, 97 Obs. 2a.
    $\ddagger$ According to Albo's ship journal, he perceived the difference at the Cape de Verde Islands on July 9, 1522; "Y este día fué miercoles, y este día tienen ellos "por jueves." (And this day was Wednesday and this day they had as Thursday.)

[^2]:    * In a note on the 18th page of the masterly English (Hakluyt Society) translation of Morga, I find the curious statement that a similar rectification was made at the same time at Macao, where the Portuguese, who reached it on an easterly course, had made the mistake of a day the other way.
    $\dagger$ Towards the close of the sixteenth century the duty upon the exports to China amounted to $\$ 40,000$ and their imports to at least $\$ 1,330,000$. In 1810, after more than two centuries of undisturbed Spanish rule, the latter had sunk to $\$ 1,150,000$. Since then they have gradually increased; and in 1861 they reached $\$ 2,130,000$.
    $\ddagger$ The Panama canal prevents this.-C.

[^3]:    * Navarrete, IV, 54 Obs. 1a.

[^4]:    * According to Gehler's Phys. Lex. VI, 450, the log was first mentioned by Purchas in an account of a voyage to the East Indies in 1608. Pigafetta does not cite it in his treatise on navigation; but in the forty-fifth page of his work it is said: "Secondo la misura che facevamo del viaggio colla cadena a poppa, noi percorrevamo 60 a 70 leghe al giorno." This was as rapid a rate as that of our (1870) fastest steamboats-ten knots an hour.

[^5]:    * The European mail reaches Manila through Singapore and Hongkong. Singapore is about equidistant from the other two places. Letters therefore could be received in the Philippines as soon as in China, if they were sent direct from Singapore. In that case, however, a steamer communication with that port must be established, and the traffic is not yet sufficiently developed to bear the double expense. According to the report of the English Consul (May, 1870), there is, besides the Government steamer, a private packet running between Hongkong and Manila. The number of passengers it conveyed to China amounted, in 1868, to 441 Europeans and 3,048 Chinese; total, 3,489 . The numbers carried the other way were 330 Europeans and 4,664 Chinese; in all, 4,994. The fare is $\$ 80$ for Europeans and $\$ 20$ for Chinamen.
    $\dagger Z$ uñiga, Mavers, $\mathbf{I}, 225$.

[^6]:    * Dr. Pedro Pelaez, in temporary charge of the diocese and dying in the cathedral, was the foremost Filipino victim. Funds raised in Spain for relief never reached the sufferers, but not till the end of Spanish rule was it safe to comment on this in the Philippines.-C.
    $\dagger$ Zuñiga, XVIII, M. Velarde, p. 139.
    $\ddagger$ Captain Salmon, Goch., S. 33.

[^7]:    * The opening of this port proved so advantageous that I intended to have given a few interesting details of its trade in a separate chapter, chiefly gathered from the verbal and written remarks of the English Vice-Consul, the late Mr. N. Loney, and from other consular reports.
    $\dagger$ In 1868, 112 foreign vessols, to the aggregate of 74,054 tons, and Spanish ships to the aggregate of 26,762 tons, entered the part of Manila. Nearly all the first came in ballast, but left with cargoss. The latter both came ans left in freight. (English Consul's Report, 1869.)

[^8]:    * In 1868 the total exports amounted to $\$ 14,013,108$; of this England alone accounted for $\$ 4,857,000$, and the whole of the rest of Europe for only $\$ 102,477$. The first amount does not include the tobacco duty paid to Spain by the colony, $\mathbf{\$ 3 , 1 6 9 , 1 4 4}$. (English Consul's Report, 1869.)

[^9]:    * La Pérouse said that Manila was perhaps the most fortunately situated city in the world.

[^10]:    * Sapan or Sibucan, Caesalpinia Sapan. Pernambuco or Brazil wood, to which the empire of Brazil owes its name, comes from the Caesalpinia echinat and the Caesalpinia Braziliensis. (The oldest maps of America remark of Brazil: "Its only useful product is Brazil (wood).") The sapan of the Philippines is richer in dye stuff than all other eastern asiatic woods, but it ranks below the Brazilian sapan. It has, nowadays, lost its reputation, owing to its being often stupidly cut down too early. It is sent especially to China, where it is used for dyeing or printing in red. The stuff is first macerated with alum, and then for a finish dipped in a weak alcoholic solution of alkali. The reddish brown tint so frequently met with in the clothes of the poorer Chinese is produced
    from sapan.
    $\dagger$ Large quantities of small mussel shells (Cypraea moneta) were sent at this period to Siam, where they are still used as money.
    $\ddagger$ Berghaus' Geo. hydrogr. Memoir.
    § Manila was first founded in 1571, but as early as 1565, Urdaneta, Legaspi's pilot, had found the way back through the Pacific Ocean while he was seeking in the higher northern latitudes for a favorable north-west wind. Strictly speaking, however, Urdaneta was not the first to make use of the return passage, for one of Legaspi's five vessels, under the command of Don Alonso de Arellano, which had on board as pilot Lope Martin, a mulatto, separated itself from the fleet after they had reached the Islands, and returned to New Spain on a northern course. in order to claim the promised reward for the discovery. Don Alonso was disappointed, however, by the speedy return of Urdaneta.

[^11]:    * Kottenkamp I., 1594.
    $\dagger$ At first the maximum value of the imports only was limited, and the Manila, merchants were not over scrupulous in making false statements as to their worth.' to put an end to these malpractices a limit was placed to the amount of silver exported. According to Mas, however, the silver illegally exported amounted to six or eight times the prescribed limit.

[^12]:    * La Pérouse mentions a French firm (Sebis), that, in 1787, had been for many years established in Manila.
    † R. Cocks to Thomas Wilson (Calendar of State Papers, India, No. 823) . . . .
    "The English will obtain a trade in China, so they bring not in any padres (as they term them), which the Chinese cannot abide to hear of, because heretofore they came in such swarms, and are always begging without shame."

[^13]:    * As late as 1857 some old decrees, passed against the establishment of foreigners, were renewed. A royal ordinance of 1844 prohibits the admission of strangers into the interior of the colony under any pretext whatsoever.

[^14]:    * Vide Pinkerton.

[^15]:    * Each packet was $5 \times 21 / 2 \times 11 / 2=18.75$ Spanish cubic feet. St. Croix.
    $\dagger$ Vide Comyn's Comercio exterior.
    $\ddagger$ The obras pias were pious legacies which usually stipulated that two-thirds of their value should be advanced at interest for the furtherance of maritime commercial undertakings until the premiums, which for a vcyage to Acapulco amounted to 50 , to China 25 , and to India 35 per cent., had increased the original capital to a certain amount. The interest of the whole was then to be devoted to masses for the founders, or to other pious and benevolent purposes. A third was generally kept as a reserve fund to cover possible losses. The government long since appropriated these reserve funds as compulsory loans, "but they are still considered as existing."

[^16]:    When the trade with Acapulco came to an end, the principals could no longer be laid out according to the intentions of the founders, and they were lent out at interest in other ways. By a royal ordinance of November 3, 1854, a junta was appointed to administer the property of the obras pias. The total capital of the five endowments (in reality only four, for one of them no longer possessed anything) amounted to nearly a million of dollars. The profits from the poans were distributed according to the amounts of the original capital, which, however, no longer existed in cash, as the government had disposed of them.

    * Vide Thevenot.
    $\dagger$ According to Morga, between the fourteenth and fifteenth.
    $\ddagger$ Vide De Guignes, Pinkerton XI, and Anson X.

[^17]:    * Vide Anson.
    $\dagger$ Randolph's History of California.
    $\ddagger$ In Morga's time the galleons took seventy days to the Ladrone Islands, from ten to twelve from thence to Cape Espíritu Santo, and eight more to Manila.
    § A very good description of these voyages may be found in the 10 th chapter of Anson's work, which also contains a copy of a sea map, captured in the Cavadonga, displaying the proper track of the galleons to and from Acapulco.

[^18]:    * De Guignes.
    $\dagger$ The officer in command of the expedition, to whom the title of general was given, had always a captain under his orders, and his share in the gain of each trip amounted to $\$ 40,000$. The pilot was content with $\$ 20,000$. The first lieutenant (master) was entitled to 9 per cent on the sale of the cargo, and pocketed from this and from the profits of his own private ventures upwards of $\$ 350,000$. (Vide Arenas.)
    $\ddagger$ The value of the cargoes Anson captured amounted to $\$ 1,313,000$, besides 35,682 ounces of fine silver and cochineal. While England and Spain were at peace, Drake plundered the latter to the extent of at least one and a half million of dollars. Thomas Candish burnt the rich cargo of the Santa Anna, as he had no room for it on board his own vessel.

    1. § For instance, in 1786 the San Andres, which had a cargo on board valued at a couple of millions, found no market for it in Acapulco; the same thing happened in 1787 to the San Jose, and a second time in 1789 to the San Andres.
[^19]:    * In 1855 its population consisted of 586 European Spaniards, 1,378 Creoles, 6,323 Malay Filipinos and mestizos, 332 Chinamen, 2 Hamburgers, 1 Portuguese, and 1 Negro.
    $\dagger$ The earthquake of 1863 destroyed the old bridge. It is intended, however, to restore it; the supporting pillars are ready, and the superincumbent iron structure is shortly expected from Europe (April, 1872). -The central span, damaged in the high water of 1914, was temporarily replaced with a wooden structure and plans have been prepared for a new bridge, permitting ships to pass and to be used also by the railway, nearer the river mouth. - $\mathbf{C}$.

[^20]:    * Roescher's Colonies.

[^21]:    * A brief description of a nipa huose, accompanying an illustration, is here omitted.-C.

[^22]:    * The following figures will give an idea of the contents of the newspapers. I do not allude to the Bulletin Official, which is reserved for official announce-
    ments, and contains little else of any importance. The number lying before
    me of the Comercio (Nov. 29, 1858), a paper that appears six times a week I do not allude to the Bulletin Official, which is reserved for official announce-
    ments, and contains little else of any importance. The number lying before
    me of the Comercio (Nov. 29, 1858), a paper that appears six times a week me of the Comercio (Nov. 29, 1858), a paper that appears six times a week, consists of four pages, the printed portion in each of which is 11 inches by 17; the whole, therefore, contains 748 square inches of printed matter. They are distributed as follows:-
    Title, $271 / 2 \mathrm{sq}$. in.; an essay on the population of Spain, taken from a book, $1021 / 2$ sq. in.; under the heading "News from Europe," an article, quoted from $1021 / 2 \mathrm{sq}$. in.; under the heading "News from Europe," an article, quoted from
    the Annals of La Caridad, upon the increase of charity and Catholic instruction in France, $401 / 2 \mathrm{sq}$. in. ; Part I, of a treatise on Art and its Origin (a series of truisms), 70 sq. in.; extracts from the official sheet, $201 / 2 \mathrm{sq}$. in.; a few ancient anecdotes, 59 sq. in. Religious portion (this is divided into two parts-official and unofficial). The first contains the saints for the different days of the year, and unofficial). The first contains the saints for the different days of the year,
    etc., and the announcements of religious festivals; the second advertises a forthcoming splendid procession, and contains the first half of a sermon preached three years before, on the anniversary of the same festival, $99 \mathrm{sq} . \mathrm{in}$., besides an instalment of an old novel, 154, and advertisements, 175 sq. in.; total, 748 sq. in. In the last years, however, the newspapers sometimes have contained serious
    essays, but of late these appear extremely seldom. essays, but of late these appear extremely seldom.

[^23]:    * Vide Pigafetta.

[^24]:    * Cock-fighting is not alluded to in the "Ordinances of good government," collected by Hurtado Corcuera in the middle of the seventeenth century. In 1779 cock-fights were taxed for the first time. In 1781 the government farmed the right of entrance to the galleras (derived from gallu, rooster) for the yearly sum of $\$ 14,798$. In 1863 the receipts from the galleras figured in the budget for $\$ 106,000$.
    A special decree of 100 clauses was issued in Madrid on the 21st of March, 1861, for the regulation of cock-fights. The 1st clause declares that since cockfights are a source of revenue to the State, they shall only take place in arenas licensed by the Government. The 6th restricts them to Sundays and holiday 3 ; the 7th, from the conclusion of high mass to sunset. The 12th forbids more than $\$ 50$ to be staked on one contest. The 38th decrees that each cock shall carry but one weapon, and that on its left spur. By the 52nd the fight is to be considered over when one or both cocks are dead, or when one shows the white feather. In the London Daily News of the 30th June, 1869, I find it reported that five men were sentenced at Leeds to two months' hard labor for setting six cocks to fight one another with iron spurs. From this it appears that this once favorite spectacle is no longer permitted in England.
    $\dagger$ The raw materials of these adventures were supplied by a French planter, M. de la Gironiere, but their literary parent is avowedly Alexander Dumas.

[^25]:    * Botanical gardens do not seem to prosper under Spanith auspices. Chamisso complains that, in his day, there were no traces left of the botanical gardens founded at Cavite by the learned Cuellar. The gardens at Madrid, even, are in a sorry plight; its hothouses are almost empty. The grounds which were laid out at great expense by a wealthy and patriotic Spaniari at Orotava (Teneriffe), a spot whose climate has been of the greatest service to invalids, are rapidly going to decay. Every year a considerable sum is appropriated to it in the national budget, but scarcely a fraction of it ever reaches Orotava. When I was there in 1867, the gardener had received no salary for twenty-two months, all the workmen were dismissed, and even the indispensable water supply had been cut off.

[^26]:    * For a proof of this vide the Berlin Ethnographical Museum, Nos. 294-295.

[^27]:    * Bertillon (Acclimatement et Acclimatation, Dict. Encycl. des Sciences Médirales) ascribes the capacity of the Spaniards for acclimatization in tropical countries to the large admixture of Syrian and African blood which flows in their veins. The ancient Iberians appear to have reached Spain from Chaldea across Africa; the Phoenicians and Carthaginians had flourishing colonies in the peninsula, and, in later times, the Moors possessed a large portion of the country for a century, and ruled with great splendcr, a state of things leading to a mixture of race. Thus Spanish blood has three distinct times been abundantly crossed with that of Africa. The warm climate of the peninsula must also largely contribute to render its inhabitants fit fer life in the tropics. The pure IndoEuropean race has never succeeded in establishing itself on the southern shores of the Mediterranean, much less in the arid soil of the tropics.

    In Martinique, where from eight to nine thousand whites live on the proceeds of the toil of 125,000 of the colcred race, the population is diminishing instead of increasing. The French creoles seem to have lost the power of maintaining themselves, in proportion to the existing means of subsistence, and of multiplying. Families which do not from time to time fortify themselves with a strain of fresh European blood, die out in from three to four generations. The same thing happens in the English, but not in the Spanish Antilles, although the climate and the natural surroundings are the same. Accor ding to Ramón de la Sagra, the death-rate is smaller among the creoles, and greater among the natives, than it is in Spain; the mortality among the garrison, however, is considerable. The same writer states that the real acclimatization of the Spanish race takes place by selection; the unfit die, and the others thrive.
    $\dagger$ An unnecessary line is here omitted.-C.

[^28]:    * Depons, speaking of the means employed in America to obtain the same end, says, "I am convinced that it is impossible to engraft the Christian religion on the Indian mind without mixing up their own inclinations and customs with those of Christianity; this has been even carried so far, that at one time theologians raised the questicn, whether it was lawful to eat human flesh? But the most singular part of the proceeding is, that the question was decided in favor of the anthropophagi."

[^29]:    * As a matter of fact, productive land is always appropriated, and in many parts of the Islands is difficult and expensive to purchase. Near Manila, and in Bulacan, land has for many years past cost over $\$ 225$ (silver) an acre.

[^30]:    * Ind. Arch. IV; 307.
    $\dagger$ In Buitenzorger's garden, Java, the author observed, however, some specimens growing in fresh water.

[^31]:    * Boyle, in his Adventures among the Dyals, mentions that he actually found pneumatic tinder-boxes, made of bamboo, in uss among the Dyaks; Bastian met with them in Burmah. Boyle saw a Dyak place some tinder on a broken piece of earthenware, hol ling it steady with his tau nb wail ? he struek it a sharp blow with a piece of bamboo. The tinler took fire. Wallace observed the same method of striking a light in Ternate.

[^32]:    * Centigrade is changed to Fahrenheit by multiplying by nine-fifths and adding thirty-two.-C.

[^33]:    * Tylor (Anahuac 227) says that this word is derived from the Mexican petlatl, a mat. The inhabitants of the Philippines call this petate, and from the Mexican petla-calli, a mat "house," derive petaca, a cigar case.

[^34]:    * Four lines, re an omitted sketch, left out.-C.

[^35]:    * Voyage en Chine, vol. II., page 33.

[^36]:    * According to the report of an engineer, the sand banks are caused by the river San Mateo, which runs into the Pasig at right angles shortly after the latter leaves the Lagoon; in the rainy season it brings down a quantity of mud, which is heaped up and embanked by the south-west winds that prevail at the time. It would, therefore, be of little use to remove the sandbanks without giving the San Mateo, the cause of their existence, a direct and separate outlet into the lake.

[^37]:    * They take baths for their maladies, and have hot springs for this purpose, particularly along the shore of the king's lake (Estang du Roy, instead of Estang de Bay by a printer's mistake apparently), which is in the Island of Manila. Thevenot.

[^38]:    * "One can scarcely walk thirty paces between Mount Makiling and a place called Bacon, which lies to the east of Los Baños, without meeting several kinds of natural springs, some very bot, some lukewarm, some of the temperature of the atmosphere, and some very cold. In a description of this place given in our archives for the year 1739, it is recorded that a hill called Natognos lies a mile to the south-east of the village, on the plateau of which there is a small plain 400 feet square, which is kept in constant motion by the volume of vapor issuing from it. The soil from which this vapor issues is an extremely white earth; it is sometimes thrown up to the height of a yard or a yard and a half, and meeting the lower temperature of the atmosphere falls to the ground in small pieces."Estado geograph., 1865.

[^39]:    * Pigafetta says that the natives, in order to obtain palm-wine, cut the top of the tree through to the pith, and then catch the sap as it oozes out of the incision. According to Regnaud, Natural History of the Coco-tree, the negroes of Saint Thomas pursue a similar method in the present day, a methot that considerably injures the trees and produces a much smaller quantity of liquor. Hernandez describes an indigenous process of obtaining wine, honey, and sago from the sacsac palm, a tree which from its stunted growth would seem to correspond with the arenga saccharifera. The trees are tapped near the top, the soft part of the trunks is hollowed out, and the sap collects in this empty space. When all the juice is extracted, the tree is allowed to dry up, and is then cut into thin pieces which, after desiccation in the sun, are ground into meal.

[^40]:    * Pigafetta mentions that the natives were in the habit of making oil, vinegar, wine, and milk, from the coco-paln, and that they drank a great deal of the wine. Their kings, he says, frequently intoxicated themselves at their banquets.

[^41]:    * A number of the Illustrated London News, of December, 1857, or January, 1858, contains a clever drawing, by an accomplished artist, of the mode of travelling over this road, under the title, "A macadamizestroad in Manila."

[^42]:    * Erd and Pickering, of the United States exploring expedition, determined the height to be 6,500 English feet ( 7,143 Spanish), not an unsatisfactory result, considering the imperfect means they possessed for making a proper measurament. In the Manila Estado geographico for 1865, the height is given, without any statement as to the source whence the estimate is derived, as 7,030 feet. The same authority says, "the large volcano is extinct since 1730, in which year its last eruption took place. The mountain burst into flames on the southern side, threw up streams of water, burning lava, and stones of an enormous size; traces of the last can be observed as far as the village of Sariaya. The crater is perhaps a league in circumference, it is highest on the northern side, and its interior is shaped like an egg-shell: the depth of the crater apparently extends half-way down the height of the mountain.'

[^43]:    * From ponte, deck; a two-masted vessel, with mat sails, of about 100 tons burden.

[^44]:    * Estado Geogr., p. 314.

[^45]:    * Officially called Cagsaua. The old town of Cagsaua, which was built higher up the hill and was destroyed by the eruption of 1814 , was rebuilt on the .spot where formerly stood a small hamlet of the name of Daraga.

[^46]:    * I learnt from Mr. Paton that the undertaking had also been represented as impracticable in Albay, "Not a single Spaniard, not a single native had ever succeeded in reaching the summit; in spite of all their precautions they would certainly be swallowed up in the sand." However, one morning, about five o'clock, they set off, and soon reached the foot cf the cone of the crater. Accompanied by a couple of natives, who soon left them, they began to make the ascent. Resting half way up, they noticed frequent masses of shining lava, thrown from the mouth of the crater, gliding down the mountain. With the greatest exertions they succeeded, between two and three o'clock, in reaching the summit, where, however, they were prevented by the noxious gas from remaining more than two or three minutes. During their descent, they restored their strength with some refreshments Sr . Muñoz had sent to meet them; and they reached Albay towards evening, where during their short stay they were treated as heroes, and presented with an official certificate of their achievement, for which they had the pleasure of paying several dollars.

[^47]:    * From $36,000,000$ to $40,000,000$ lbs. of cacao are consumed in Europe annually; of which quantity nearly a third goes to France, whose consumption of it between 1853 and 1866 has more than doubled. In the former year it amounted to $6,215,000 \mathrm{lbs}$., in the latter to $12,973,534 \mathrm{lbs}$. Venezuela sends the finest cacaos to the European market, those of Porto Cabello and Caracas. That of Caracas is the dearest and the best, and is of four kinds. Chuao, Ghoroni, O'Cumar, and Rio Chico. England consumes the cacao grown in its own colonies, although the duty ( $1 d$ per lb.) is the same for all descriptions. Spain, the principal consumer, imports its supplies from Cuba, Porto Rico, Ecuador, Mexico, and Trinidad. Several large and important plantations have recently been established by Frenchmen in Nicaragua. The cacao beans of Soconusco (Central America) and Esmeralda (Ecuador) are more highly esteemed than the finest of the Venezuela sorts; but they are scarcely ever used in the Philippines, and cannot be said to form part of their commerce. Germany contents itself with the inferior kinds. Guayaquil cacao, which is only half the price of Caracas, is more popular amongst the Germans than all the other varieties together.

[^48]:    * C. Scherzer, in his work on Central America, gives the cacan-tree an existence of twenty years, and says that each tree annually produces from 15 to 20 ounces of cacao. 1,000 plants will produce $1,250 \mathrm{lbs}$. of cacao, worth $\$ 250$; so that the annual produce of a single tree is worth a quarter of a dollar. Mitscherlich says that from 4 to 6 lbs . of raw beans is an average produce. A liter of dried cacao beans weighs 630 grains; of picked and roasted, 610 grains.
    $\dagger$ In 1727 a hurricane destroyed at a single blast the important cacao plantation of Martinique, which had been created by long years of extraordinary care. The same thing happened at Trinidad.-Mitscherlich.

[^49]:    * F. Engel mentions a disease (mancha) which attacks the tree in America, beginning by destroying its roots. The tree soon dies, and the disease spreads so rapidly that whole groves of cacao-trees utterly perish and are turned into pastures for cattle. Even in the most favored localities, after a long season of prosperity, thousands of trees are destroyed in a single night by this disease, just as the harvest is about to take place. An almost equally dangerous foe to cultivation is a moth whose larva entirely destroys the ripe cacao beans; and which only cold and wind will kill. Humboldt mentions that cacao beans which have been transported over the chilly passes of the Cordilleras are never attacked by this pest.
    $\dagger$ G. Bornoulli quotes altogether eighteen kinds; of which he mentions only one as generally in use in the Philippines.

[^50]:    * Pili is very common in South Luzon, Samar, and Leyte; it is to be found in almost every village. Its fruit, which is almost of the size of an ordinary plum but not so round, contains a hard stone, the raw kernel of which is steeped in syrup and candied in the same manner as the kernel of the sweet pine, which it resembles in flavor. The large trees with fruit on them, "about the size of almonds and looking like sweet-pine kernels," which Pigafetta saw at Jomonjol were doubtless pili-trees. An oil is expressed from the kernels much resembling sweet almond oil. If incisions are made in the stems of the trees, an abundant pleasant-smelling white resin flows from them, which is largely used in the Philippines to calk ships with. It also has a great reputation as an anti-rheumatic plaster. It is twenty years since it was first exported to Europe; and the first consignees made large profits, as the resin, which was worth scarcely anything in the Philippines, became very popular and was much sought in Europe.
    $\dagger$ The general name for the beverage was Cacahoa-atl (cacao water). Chocolatl was the term given to a particular kind. F. Hernandez found four kinds of cacao in use among the Axtecs, and he describes four varieties of drinks that were prepared from them. The third was called chocolatl, and apparently was prepared as follows:-Equal quantities of the kernels of the pochotl (Bombax ceiba) and cacahoatl (cacao) trees were finely ground, and heated in an earthen vessel, and all the grease removed as it rose to the surface. Maize, crushed and soaked, was added to it, and a beverage prepared from the mixture; to which the oily parts that had been skimmed off the top were restored, and the whole was drunk hot.

[^51]:    * Berthold Seemann speaks of a tree with finger-shaped leaves and small round berries, which the Indians sometimes offered for sale. They made chocolate from them, which in flavor much surpassed that usually made from cacao.

[^52]:    * Report of the French consul.
    $\dagger$ Mysore and Mocha coffees fetch the highest prices. From $\$ 20$ to $\$ 22.50$ per cwt. is paid for Mysore; and as much as $\$ 30$, when it has attained an age of five or six years, for Mocha.

[^53]:    * In 1865-66-67 California imported three and one-half, eight and ten million lbs. of coffee, of which two, four and five millions respectively came from Manila. In 1868 England was the best customer of the Philippines.
    $\dagger$ Report of the Belgian consul.
    $\ddagger$ Coffee is such an exquisite beveraze, and is so seldom properly prepared, that the following hints from a master in the art (Report of the Jury, Internat. Exhib., Paris, 1868) will not be unwelcome:-1st. Select good coffees. 2nd. Mix them in the proper proportions. 3rd. Thoroughly dry the beans; otherwise in roasting them a portion of the aroma escapes with the steam. 4th. Roast them in a dry atmosphere, and roast each quality separately. 5th. Allow them to cool rapidly. If it is impossible to roast the beans at home, then purchase only sufficient for each day's consumption. With the exception of the fourth, however, it is easy to follow all these directions at home; and small roasting machines are purchasable, in which, with the aid of a spirit lamp, small quentities can be prepared at a time. It is best, when possible, to buy coffee in large quantities, and keep it stored for two or three years in a dry place.

[^54]:    * A creeping, or rather a running fern, nearly the only one of the kind in the whole species.

[^55]:    * The official accounts stated that they had kidnapped twenty-one persons. in a couple of weeks.

[^56]:    * Le Gentil, in his Travels in the Indian Seas, (1761) says: "The monks are the real rulers of the provinces. * * * Their power is so unlimited that no Spaniard cares to settle in the neighborhood. * * * The monks would give him a great deal of trouble."

[^57]:    * St. Croix.
    $\dagger$ There are three classes of alcaldeships, namely, entrada, ascenso, and termino (vide Royal Ordinances of March, 1837); in each of which an alcalde must serve for three years. No official is allowed, under any pretence, to serve more than ten years in any of the Asiatic magistracies.

[^58]:    * The law limiting the duration of appointments to this short period dates from the earliest days of Spanish colonization in America. There was also a variety of minor regulations, based on suspicion, prohibiting the higher officials from mixing in friendly intercourse with the colonists.

[^59]:    * A secular priest in the Philippines once related to me, quite of his own accord, what had led him to the choice of his profession. One day, when he was a non-commissioned officer in the army, he was playing cards with some comrades in a shady"balcony. "See," cried one of his friends, observing a peasant occupied in tilling the fields in the full heat of the sun, "how the donkey yonder is toiling and perspiring while we are lolling in the shade." The happy conceit of letting the donkeys work while the idle enjoyed life made such a deep impression on him that he determined to turn priest; and it is the same felicitous thought that has impelled so many impecunious gentlemen to become colonial officials. The little opening for civil labor in Spain and Portugal, and the prospect of comfortable perquisites in the colonies, have sent many a starving cabctlleró across the ocean.

[^60]:    * The exploitation of the State by party, and the exploitation of party by individuals, are the real secrets of all revolutions in the Peninsula. They are caused by a constant and universal struggle for office. No one will work, and everybody wants to live luxuriously; and this can only be done at the expense of the State, which all attempt to turn and twist to their own ends. Shortly after the expulsion of Isabella, an alcalde's appointment has been known to have been given away three times in one day. (Prussian Year-Book, January, 1869.)
    $\dagger$ According to Grunow, Cladophona arrisgona Kuetzing-Conferva arrisgona Montague.

[^61]:    * A visita is a small hamlet or village with no priest of its own, and dependent upon its largest neighbor for its religious ministrations.

[^62]:    * Pigafetta mentions that the female musicians of the King of Cebu were quite naked, or only covered with an apron of bark. The ladies of the Court were content with a hat, a short cloak*and a clcth around the waist.
    $\dagger$ Perhaps the same reason induced the Chinese to purchase crucifixes at the time of their first intercourse with the Portuguese; for Pigafetta says: "The Chinese are white, wear clothes, and eat from tables. They also possess crucifixes but it is difficult to say why or where they got them."

[^63]:    * One line here omitted. $C$.

[^64]:    * Apud Camarines quoque terram eodem die quator decies contremuisse, fide dignis testimoniis renuntiatum est: multa interim aedificia diruta. Ingentem montem medium crepuisse immani hiatu, ex immensa vi excussisse arbores per oras pelagi, ita ut leucam occuparent aequoris, nec humor per illud intervallum appareret. Accidit hoc anno 1628.-S. Eusebius Vierembergius, Historia Naturae, lib. xvi., 383. Antwerpiae, 1635.

[^65]:    * At Fort William, Calcutta, experiments have proved the extraordinary endurance of the pine-apple fibre. A cable eight centimeters in circumference was not torn asunder until a force of 2,850 kilogrammes had been applied to it. Report of the Jury, London International Exhibition.

[^66]:    * Sapa means shallow.
    $\dagger$ To the extraordinary abundance of these annulates in Sikkin, Hooker (Himalayan Journal, i, 167) ascribes the death of many animals, as also the murrain known as rinderpest, if it occurred after a very wet season, when the leech appears in incredible numbers. It is a known fact that these worms have existed for days together in the nostrils, throat, and stomach of man, causing inexpressible pain and, finally, death.

[^67]:    * Gemelli Careri has already mentioned them.

[^68]:    * I discovered similar formations, of extraordinary beauty and extent, in the great silicious beds of Steamboat Springs in Nevada.

[^69]:    * Arenas thinks that the ancient annals of the Chinese probably contain information relative to the settlement of the present inhabitants of Manila, as that people had early intercourse with the Archipelago.

[^70]:    * Probably the Anodonta Purpurea, according to V. Martens.
    $\dagger 1$ ganta $=3$ liters. 1 quiñon $=100$ loànes $=2.79495$ hectares $=6.89$ acres. 1 caban $=25$ gantas.

[^71]:    * Scherzer, Miscellaneous Information.

[^72]:    * More than one hundred years later, Father Taillandier writes:-"The Spaniards have brought cows, horses, and sheep from America; but thess animals cannot live there on account of the dampness and inundations."-(Letters from Father Taillandier to Father Willard.)
    $\dagger$ At the present time the Chinese horses are plump, large-headed, hairy, and with bushy tails and manes; and the Japanese, elegant and enduring, similar to the Arabian. Good Manila horses are of the latter type, and are much prized by the Europeans in Chinese seaport towns.

[^73]:    * Compare Hernandez, Opera Omnia; Torquemada, Monarchia Indica.

[^74]:    * Buyo is the name given in the Philippines to the preparation of betel suitable for chewing. A leaf of betel pepper (Chavica betel), of the form and size of a bean-leaf, is smeared over with a small piece of burnt lime of the size of a pea, and rolled together from both ends to the middle; when, one end of the roll being inserted into the other, a ring is formed, into which a smooth piece of areca nut of corresponding size is introduced.

[^75]:    * Twelve lines are omitted here.-C.

[^76]:    * Four lines are omitted.-C.

[^77]:    * In the country it is believed that swine's flesh often causes this malady. A friend, a physiologist, conjectures the cause to be the free use of very fat pork; but the natives commonly eat but little flesh, and the pigs are very seldom fat.

[^78]:    * Compare A. Erman, Journey Round the Earth through Northern Asia, vol. iii, sec. i, p. 191.
    $\dagger$ According to Semper, p. 69, in Zamboanga and Basilan.

[^79]:    * The fear of waking sleeping persons really refers to the widely-spread superstition that during sleep the soul leaves the body; numerous instances of which occur in Bastian's work. Amongst the Tinguianes (North Luzon) the worst of all curses is to this effect: "May'st thou die sleeping!"-Informe, i. 14.
    $\dagger$ Lewin ("Chittagong Hill Tracks," 1869, p. 46) relates of the mountain people at that place: "Their manner of kissing is peculiar. Instead of pressing lip to lip. they place the mouth and nose upon the cheek, and inhale the breath strongly. Their form of speech is not 'Give me a kiss,' but 'Smell me.'"

[^80]:    * Probably pot-stone, which is employed in China in the manufacture of cheap ornaments. Gypseous refers probably only to the degree of hardness.
    $\dagger$ In the Christy collection, in London, $I$ saw a stone of this kind from the Schiffer Islands, employed in a contrivance for the purpose of protection against rats and mice. A string being drawn through the stone, one end of it is suspended from the ceiling of the room, and the objects to be preserved hang from the other. A knot in the middle of the string prevents its sliding below that point, and, every touch drawing it from its equilibrium, it is impossible for rats to climb upon it. A similar contrivance used in the Viti Islands, but of wood, is figured in the Atlas to Dumont D'Urville's "Voyage to the South Pole," (i. 95).

[^81]:    * "Carletti's Voyages," ii. 11.
    $\dagger$ "Life in the Forests of the Far East," i. 300.

[^82]:    * According to Father Camel ("Philisoph. Trans. London," vol. xxvi, p. 246), hantu means black ants the size of a wasp; amtig, smaller black; and hantic, red ants.
    $\dagger$ According to Dr. Gerstaecker, probably Phrynus Grayi Walck Gerv., bringing forth alive. "S. Sitzungsb. Ges. Naturf. Freunde, Berl.", March 18, 1862, and portrayed and described in G. H. Bronn, "Ord. Class.," vol. v. 184.
    $\ddagger$ Calapnit, Tagal and Bicol, the bat; calapnitan, consequently, lord of the bats.

[^83]:    * In only one out of several experiments made in the Berlin Mining College did gold-sand contain 0.014 gold; and, in one experiment on the heavy sand remaining on the mud-board, no gold was found.
    $\dagger$ The Gogo is a climbing Mimosa (Entada purseta) with large pods, very abundant in the Philippines; the pounded stem of which is employed in washing, like the soap-bark of Chili (Quillaja saponaria); and for many purposes, such as baths and washing the hair of the head, is preferred to soap.

[^84]:    * A small gold nugget obtained in this manner, tested at the Berlin Mining College, consisted of -

    | Gold. | 77.4 |
    | :---: | :---: |
    | Silver. | 19.0 |
    | Iron. | 0.5 |
    | Flint earth | 3. |
    | Loss. | 0.1 |

    $\dagger$ The nest and bird are figured in Gray's "Genera of Birds"; but the nest does not correspond with those found here. These are hemispherical in form, and consist for the most part of coir (coco fibers); and, as if prepared by the hand of man, the whole interior is covered with an irregular net-work of fine threads of the glutinous edible substance, as well as the upper edge, which swells gently outwards from the center towards the sides, and expands into two wing-shaped prolongations, resting on one another, by which the nest is fixed to the wall. Dr. v. Martens conjectures that the designation salangane comes from langayan, bird, and the Malay prefix sa, and signifies especially the nest as something coming from the bird.-("Journal of Ornith.," Jan., 1866.)

[^85]:    * Spanish Catalogue of the Paris Exhibition, 1867.

[^86]:    * "Informe sobre las Minas de Cobre," Manila, 1862.

[^87]:    * According to the prices current with us, the value would be calculated at about $\$ 12$; the value of the analyzed specimen, to which we have before referred, \$14.50.

[^88]:    * In Daet at that season six nuts cost one cuarto; and in Naga, only fifteen leagues away by water, they expected to sell two nuts for nine cuartos (twentysevenfold). The fact was that in Naga, at that time, one nut fetched two cuartos;-twelve times as much as in Daet.

[^89]:    * N. Loney asserts, in one of his excellent reports, that there never is a deficiency of suitable laborers. As an example, at the unloading of a ship in Iloilo, many were brought together at one time, induced by the small rise of wages from one to one and one-half reales; even more hands than could be employed. The Belgian consul, too, reports that in the provinces where the abaca grows the whole of the male population is engaged in its cultivation, in consequence of a small rise of wages.

[^90]:    * An unfinished canal, to run from the Bicol to the Pasacao River, was once dug, as is thought, by the Chinese, who carried on commerce in great numbers.Arenas, p. 140.

[^91]:    * La Situation Economique de l'Espagne.
    $\dagger$ Lesage, "Coup d' Oeil," in Journal des Economistes, September, 1868
    $\ddagger$ From barometrical observations-
    Goa, on the northern slope of the Isarog. . . . . . . . . . . 32
    Uacloy, a settlement of Igorots. . . . . . . . . . . . . . . . . . . 161
    Ravine of Baira. . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1,134
    Summit of the Isarog . . . . . . . . . . . . . . . . . . . . . . . . . . . . 1,966

[^92]:    * The skull of a slain Igorot, as shown by Professor Virchow's investigation, has a certain similarity to Malay skulls of the adjoining Islands of Sunda, especially to the skulls of the Dyaks.

[^93]:    * Pigafetta found Amboyna inhabited by Moors (Mohammedans) and heathens; "but the first possessed the seashore, the latter the interior." In the harbor of Brune (Borneo) he saw two towns; one inhabited by Moors, and the other, larger than that, and standing entirely in the salt-water, by heathen. The editor remarks that Sonnerat ("Voyage aux Indes") subsequently found that the heathen had been driven from the sea, and had retired into the mountains.

[^94]:    * On Coello's map these proportions are wrongly stated.

[^95]:    * "Java, seine Gestalt (its formation)" II. 125.

[^96]:    * An intelligent mestizo frequently visited me duting my sickness. According to his statements, besides the copper already mentioned, coal is found in three places, and even gold and iron were to be had. To the same man I am indebted for Professor Virchow's skull of Caramuan, referred to before, which was said to have come from a cavern in Umang, one league from Caramuan. Similar skulls are also said to be found at the Visita Paniniman, and on a small island close to the Visita Guialo.
    $\dagger$ They are made of bamboo.

[^97]:    * The fruit of the wild pili is unfit for food.

[^98]:    * 17.375 Cent. or 63 Far.-C.

[^99]:    * 15.6 Cent. or 60 Far.-C.

[^100]:    * Sor Inspector por S. M.

    Nosotros dos Capnes actuales de Rancherias de Lalud y Uacloy comprension del pueblo de Goa prov.a de Camarines Sur. Ante los pies de vmd postramos y decimos. Que por tan deplorable estado en que nos hallabamos de la infedelidad recienpoblados esta visitas de Rancherias ya nos Contentamos bastantemente en su felis llegada y suvida de este eminente monte de Isarog loque havia con quiztado industriamente de V. bajo mis consuelos, y alibios para poder con seguir a doce ponos ( $i$. e. arboles) de cocales de mananguiteria para Nuestro uso y alogacion a los demas Igorotes, o montesinos q. no quisren vendirnos; eta utilidad publica y reconocer a Dios y a la soberana Reyna y Sora Doña Isabel 2 a (que Dios Gue) $Y$ por intento.
    A. V. pedimos, y suplicamos con humildad secirva proveer y mandar, si es gracia segun lo q. imploramos, etc. Domingo Tales $\dagger$. Jose Laurenciano $\dagger$.

[^101]:    * Dendrobium ceraula, Reichenbach.

[^102]:    *Raflesia Cumingii R. Brown, according to Dr. Kuhn.

[^103]:    * According to E. Bernaldez ("Guerra al Sur") the number of Spaniards and Filipinos kidnapped and killed within thirty years amounted to twenty thousand.
    $\dagger$ The richly laden Nao (Mexican galleon) acted in this way.
    $\ddagger$ Extract from a letter of the alcalde to the captain-general, June 20, '60:"For ten days past ten pirate vessels have been lying undisturbed at the island of San Miguel, two leagues from Tabaco, and interrupt the communication with the island of Catanduanes and the eastern part of Albay. $*_{*}{ }_{*}$ They have committed several robberies, and carried off six men. Nothing can be done to resist them as there are no fire-arms in the villages, and the only two faluas have been detained in the roads of San Bernardino by stress of weather."

    Letter of June 25:-"Besides the above private ships four large pancos and four small vintas have made their appearance in the straits of San Bernardino. *** Their force amounts from four hundred and fifty to five hundred men. * * * Already they have killed sixteen men, kidnapped ten, and captured one ship."

[^104]:    * In Chamisso's time it was even worse. "The expeditions in armed vessels, which were sent from Manila to cruise against the enemy (the pirates) $*_{*}^{*}$ serve only to promote smuggling, and Christians and Moros avoid one another ${ }_{*}^{\text {with equal diligence on such occasions." ("Observations and Views," p. 73.) }}$ * * * Mas (i. iv. 43) reports to the same effect, according to notices from the secretary-general's office at Manila, and adds that the cruisers sold even the royal arms and ammunition, which had been entrusted to them, whence much passed into the hands of the Moros. The alcaldes were said to influence the commanders of the cruisers, and the latter to overreach the alcaldes; but both usually made common cause. La Pérouse also relates (ii., p. 357), that the alcaldes bought a very large number of persons who had been made slaves by the pirates (in the Philippines); so that the latter were not usually brought to Batavia where they were of much less value.
    $\dagger$ According to the Diario de Manila, March 14, 1866, piracy on the seas had diminished, but had not ceased. Paragua, Calamianes, Mindoro, Mindanao, and the Bisayas still suffer from it. Robberies and kidnapping are frequently carried on as opportunity favors; and such casual pirates are to be extirpated only by extreme severity. According to my latest accounts, piracy is again on the increase.

[^105]:    * The Spaniards attempted the conquest of the Sulu Islands in 1628, 1629, 1637, 1731, and 1746; and frequent expeditions have since taken place by way of reprisals. A great expedition was likewise sent out in October, 1871, against Sulu, in crder to restrain the piracy which recently was getting the upper hand; indeed, a year or two ago, the pirates had ventured as far as the neighborhood of Manila; but in April of this year (1872) the fleet returned to Manila without having effected its object. The Spaniards employed in this expedition almost the whole marine force of the colony, fourteen ships, mostly steam gunboats; and they bombarded the chief town without inflicting any particular damage, while the Mcros withdrew into the interior, and awaited the Spaniards (who, indeed, did not venture to land) in a well-equipped body of five thou and men. After months of inactivity the Spaniards burnt down an unarmed place on the ccast, committing many barbarities on the occasion, but drew back when the warricrs advanced to the combat. The ports of the Sulu archipelago are closed to trade by a decree, although it is questionable whether all navigatiors will pay any regard to it. Not long since the sovereignty of his district was offered by the Sultan of Sulu to the King of Prussia; but the offer was decined.
    $\dagger$ The Diario de Manila of June 4, 1866, states:-"Yesterday the military commissicn, established by ordinance of the 3rd August, 1865, discontinued its functions. The ordinary tribunals are again in force. The numerous bands of thirty, fcrty, and more individuals, armed to the teeth, which have left behind them their traces of blood and fire at the doors of Manila and in so many other places, are annihilated. * * * More than fifty robbers have expiated their crimes on the gallows, and one hundred and forty have been condemned to presidio (forced labor) or to other punishments."

[^106]:    * According to Arenas ("Memorias," 21) Albay was formerly called Ibalon; Tayabas, Calilaya; Batangas, Comintan; Negros, Buglas; Cebu, Sogbu; Mindoro, Mait; Samar, Ibabao; and Basilan, Taguima. Mindanao is called Cesarea by B. de la Torre, and Samar, by R. Dudleo "Arcano del Mare" (Florence, 1761), Camlaia. In Hondiv's map of the Indian islands (Purchas, 605) Luzon is Luconia; Samar, Achan; Leyte, Sabura; Camarines, Nebui. In Albo's "Journal," Cebu is called Suba; and Leyte, Seilani. Pigafetta describes a city called Cingapola in Zubu, and Leyte, on his map, is in the north called Baybay, and in the south Ceylon.

[^107]:    * No mention is made of it in the Estado geografico of the Franciscans, published at Manila in 1855.

[^108]:    * Small ships which have no cannon should be provided with pitchers filled with water and the fruit of the sacchariferous arenga, for the purpose of besprinkling the pirates, in the event of an attack, with the corrosive mixture, which causes a burning heat. Dumont d'Urville mentions that the inhabitants of Solo had, during his visit, poisoned the wells with the same fruit. The kernels preserved in sugar are an agreeable confection.

[^109]:    * There were also elected a teniente mayor (deputy of the gobernadorcillo) a juez mayor (superior judge) for the fields, who is always an ex-captain; a second judge for the police; a third judge for disputes relating to cattle; a second and third teniente; and first and second policemen; and finally, in addition, a teniente, a judge, and a policeman for each visita. All three of the judges can be ex-capitanes, but no ex-capitan can be teniente. The first teniente must be taken from the higher class, the others may belong either to that or to the common people. The policemen (alguacils) are always of the latter class.

[^110]:    * G. Squier ("States of Central America," 192) mentions a block of mahogany, seventeen feet in length, which, at its lowest section, measured five feet six, inches square, and contained altogether five hundred fifty cubic feet.

[^111]:    * According to Dr. V. Martens, Modiola striatula, Hanley, who found the same bivalve at Singapore, in brackish water, but considerably larger. Reeve also delineates the species collected by Cumming in the Philippines, without precise mention of the locality, as being larger ( 38 mm .), that from Catarman being 17 mm .

[^112]:    * In Sumatra Wallace saw, in the twilight, a lemur run up the trunk of a tree, and then glide obliquely through the air to another trunk, by which he nearly reached the ground. The distance between the two trees amounted to 210 feet, and the difference of height was not above 35 or 40 feet; consequently, less than 1:5.-("Malay Archipelago," i. 211).

[^113]:    * According to W. Peters, Tropidolaenus Philippinensis, Gray.

[^114]:    * V. Martens identified amongst the tertiary mussels of the banks of clay the following species, which still live in the Indian Ocean:-Venus (Hemitapes) hiantina, Lam.; V. squamosa, L.; Arca cecillei, Phil.; A. inaequivalvis, Brug.; A. chalcanthum, Rv., and the genera Yoldia, Pleurotoma, Cuvieria, Dentalium, without being able to assert their identity with living species.

[^115]:    * Tarsius spectrum, Tem.; in the language of the country-mago.
    $\dagger$ Father Camel mentions that the little animal is said to live only on coal, but that it was an error, for he ate the ficus Indica (by which we here understand him to mean the banana) and other fruits. (Camel de quadruped. Phil. Trans., 1706-7. London.) Camel also gives (p. 194) an interesting account of the kaguang, which is accurate at the present day.-Ibid., ii. S. 2197.

[^116]:    * The following communication appeared for the first time in the reports of a session of the Anthropological Society of Berlin; but my visitors were there denominated Palaos islanders. But, as Prof. Semper, who spent a long time on the true Palaos (Pelew) islands, correctly shows in the "Corresp.-B1. f. Anthropol.," 1871 , No. 2, that Uliai belongs to the group of the Carolinas, I have here retained the more common expression, Micronesian, although those men, respecting whose arrival from Uliai no doubt existed, did not call themselves Caroline islanders, but Palaos. As communicated to me by Dr. Graeffe, who lived many years in Micronesia, Palaos is a loose expression like Kanaka and many others, and does not, at all events, apply exclusively to the inhabitants of the Pelew group.

[^117]:    * Dumont d'Urville, Voyaje to the South Pole, v. 206, remarks that the natives call their island Gouap or Ouap, but never Yap; and that the husbandry in that place was superior to anything he had seen in the South Sea.

[^118]:    * The voyages of the Polynesians were also caused by the tyranny of the victorious parties, which compelled the vanquished to emigrate.

[^119]:    * Pigafetta, p. 51.
    $\dagger$ Morga, f. 127.
    $\ddagger$ "The Bisayans cover their teeth with a shining varnish, which is either black, or of the color of fire, and thus their teeth become either black, or red like cinnabar; and they make a small hole in the upper row, which they fill with gold, the latter shining all the more on the black or red ground."-(Thévenot, Religieux, 54.) Of a king of Mindanao, visited by Magellan at Massana, it is written:-"In every tooth he had three machie (spots?) of gold, so that they had the appearance of being tied together with gold;" which Ramusio interprets -"On each finger he had three rings of gold."-Pigafetta, p. 66; and compare also Carletti, Voyages, i. 153.
    § 42 and 30 Cent. or 108 and 86 Fahr.-C.

[^120]:    * In one of these cliffs, sixty feet above the sea, beds of mussels were found: ostrea, pinna, chama; according to Dr. V. M.-O. denticula, Bron.; O. cornucopiae, Chemn.; O. rosacea, Desh.; Chama sulfurea, Reeve; Pinna Nigrina, Lam. (?).
    $\dagger$ In the Athenaeum of January 7, 1871, Captain Ullmann describes a funeral ceremony (tiwa) of the Dyaks, which corresponds in many points with that of the ancient Bisayans. The coffin is cut out of the branch of a tree by the nearest male kinsman, and it is so narrow that the body has to be pressed down into it, lest another member of the family should die immediately after to fill up the gap. As many as possible of his effects must be heaped on the dead person, in order to prove his wealth and to raise him in the estimation of the spirit world; and under the coffin are placed two vessels, one containing rice and the other water.

    One of the principal ceremonies of the tiwa consisted formerly (and does still in some places) in human sacrifices. Where the Dutch Government extended these were not permitted; but sometimes carabaos or pigs were killed in a cruel manner, with the blood of which the high priest smeared the forehead, breast, and arms of the head of the family. Similar sacrifices of slaves or pigs were practised amongst the ancient Filipinos, with peculiar ceremonies by female priests (Catalonas).

[^121]:    * In the chapter De monstris et quasi monstris * * * of Father Camel, London Philos. Trans., p. 2269, it is stated that in the mountains between Guiuan and Borongan, footsteps, three times as large as those of ordinary men, have been found. Probably the skulls of Lauang, which are pressed out in breadth, and covered with a thick crust of calcareous sinter, the gigantic skulls (skulls of giants) have given rise to the fable of the giants' footsteps.

[^122]:    * Hemiramphus viviparus, W. Peters (Berlin Monatsb., March 16, 1865).

[^123]:    * Lehrbuch der Pharmakognosie des Pfauzenreichs (Compendium of the "Pharmacopoeia of the Vegetable Kingdom,") p. 698.

[^124]:    * Philos. Trans. 1699, No. 249, pages 44, 87.

[^125]:    * At Borongan the tinaja of 12 gantas cost six reals (one quart about two pesetas), the pot two reals, the freight to Manila three reals, or, if the product is carried as cargo (matrose), two and one-half reals. The price at Manila refers to the tinaja of sixteen gantas.

[^126]:    * Newly prepared coconut oil serves for cooking, but quickly becomes rancid. It is very generally used for lighting. In Europe, where it seldom appears in a fluid state, as it does not dissolve until $16^{\circ}$ R., ( 20 C . or 68 Fahr .) it is used in the manufacture of tapers, but especially for soap, for which it is peculiarly adapted. Coconut soap is very hard, and brilliantly white, and is dissolved in salt water more easily than any other soap. The oily nut has lately been imported from Brazil into England under the name of "copperah," (copra) and pressed after heating.

[^127]:    * On Pigafetta's map Leyte is divided into two parts, the north being called Baibay, and the south Ceylon. When Magellan in Massana (Limasana) inquired after the most considerable places of business, Ceylon (i. e. Leyte), Calagan (Caraga), and Zubu (Cebu) were named to him. Pigaf., 70.
    $\dagger$ According to Dr. Gerstaceker: Oedipoda subfasciata, Haan, Acridium Manilense, Meyen. The designation of Meyen which the systemists must have overlooked, has the priority of Haan's; but it requires to be altered to Oedipoda Manilensis, as the species does not belong to the genus acridium in the modern sense. It occurs also in Luzon and in Timor, and is closely allied to our European migratory locusts Oedipoda migratoria.

[^128]:    * After the king had withdrawn * * * "sweetmeats and cakes in abundance were brought, and also roasted locusts, which were pressed upon the guests as great delicacies."-"Col. Fytche's Mission to Mandalay Parliament," Papers, June, 1869.

[^129]:    * The names of these two localities, on Coello's map, are confounded. Burauen lies south of Dagami.

[^130]:    * 62.5 Cent. or 144.5 Fahr.-C.

[^131]:    * A small river enters the sea 950 brazas south of the tower of Abuyog.

[^132]:    * Gobius giuris Buch. Ham.

[^133]:    * The lake at that time had but one outlet, but in the wet season it may be in connection with the Mayo, which, at its north-east side, is quite flat.
    $\dagger$ Or some thirty-eight yards if the old Dutch ell is meant.-C.

[^134]:    * Pintados, or Bisayas, according to a native word denoting the same, must be the inhabitants of the islands between Luzon and Mindanao, and must have been so named by the Spaniards from their practice of tattoing themselves. Crawfurd ("Dict." 339) thinks these facts not firmly established, and they are certainly not mentioned by Pigafetta; who, however, writes, p. $80:-$ " He (the king of Zubut) was * * * painted in various ways with fire." Purchas ("Pilgrimage," fo. i. 603) - "The king of Zubut has his skinne painted with a hot iron pensill;" and Mcrga, fo. 4-"Traen todo il cuerpo labrado con fuego." From this they appear to have tattoed themselves in the manner of the Papuas, by burning in spots and stripes into the skin. But Morga states in another place (f. 138) -"They are distinguished from the inhabitants of Luzon by their hair which the men cut into a pigtail after the old Spanish manner, and paint their bodies in many patterns, without touching the face." The custom of tattooing, which appears to have ceased with the introduction of Christianity, for the clergyman so often quoted (Thevenot, p. 4) describes it as unknown, cannot be regarded as a characteristic of the Bisayans; and tribes of the northern part of Luzon tattoo at the present day.

[^135]:    * Mezzeria (Italian); metayer (French).

[^136]:    * In China an oil is procured from the seeds of vernicia montana, which, by the addition of alum, litharge, and steatite, with a gentle heat, easily forms a valuable varnish which, when mixed with resin, is employed in rendering the bottoms of vessels watertight. P. Champion, Indust. Anc. et Mod. de l'Emp. Chinois." 114.

[^137]:    * Petzholdt ("Caucasus," i. 203) mentions that in Bosslewi the price of a clay vessel is determined by its capacity of maize.

[^138]:    * As usual these abuses spring from the non-enforcement of a statute passed in 1848 (Leg. ult., i. 144), which prohibits usurious contracts with servants or assistants, and threatens with heavy penalties all those who, under the pretext of having advanced money, or of having paid debts or the poll-tax or exemption from service, keep either individual natives or whole families in a continual state of dependence upon them, and always secure the increase of their obligations to them by not allowing them wages sufficient to enable them to satisfy the claims against them.

[^139]:    * Formerly it appears to have been different with them. "These Bisayans are a people little disposed to agriculture, but practised in navigation, and eager for war and expeditions by sea, on account of the pillage and prizes, which they call 'mangubas,' which is the same as taking to the field in order to steal." Morga, f. 138.

[^140]:    * Ill-usage prevails to a great extent, although prohibited by a stringent law; the non-enforcement of which by the alcaldes is charged with a penalty of 100 dollars for every single case of neglect. In many provinces the bridegroom pays to the bride's mother, besides the dower, an indemnity for the rearing ('mother's milk") which the bride has enjoyed (bigay susu). Accorsing to Colin ("Labor Evangelico," p. 129) the penhimuyat, the present which the mother received for night-watching and care during the bringing up of the bride, amounted to one-fifth of the dowry.

[^141]:    * The Asuang is the ghoul of the Arabian Nights' tales.-C.

[^142]:    * Veritable cannibals are not mentioned by the older authors on the Philippines. Pigafetta (p. 127) heard that a people lived on a river at Cape Benuian (north of Mindanao) who ate only the hearts of their captured enemies, along with lemon-juice; and Dr. Semper ("Philippines,") in '62 found the same custom. with the exception of the lemon-juice, on the east coast of Mindanao.
    $\dagger$ The Anito occurs amongst the tribes of the Malayan Archipelago as Antu, but the Anito of the Philippines is essentially a protecting spirit, while the Malayan Antu is rather of a demoniacal kind.

[^143]:    * These idol images have never come under my observation. Those figured in Bastian and Hartmann's Journal of Ethnology (b. i. pl. viii. Idols from the Philippines,) whose originals are in the Ethnographical Museum of Berlin, were certainly acquired in the Philippines, but, according to A. W. Franks, undoubtedly belong to the Solomon Islands. Sections ii. to viii., p. 46, in the catalogue of the Museum at Prague are entitled:-"Four heads of idols, made of wood, from the Philippines, contributed by the Bohemian naturalist Thaddaeus Haenke, who was commissioned by the King of Spain, in the year 1817, to travel in the islands of the South Sea." The photographs, which were obligingly sent here at my request by the direction of the museum, do not entirely correspond to the above description, pointing rather to the west coast of America, the principal field of Haenke's researches. The Reliquiae Botanicae, from his posthumous papers, likewise ufford no information respecting the origin of these idols.
    $\dagger$ On the Island of Panay.

[^144]:    * As an example, in anticipation of an attack on Cogseng, all the available forces, including those of Zamboanga, were collected round Manila, and the Moros attacked the island with sixty ships, whereas formerly their armaments used not to exceed six or eight ships. Torrubia, p. 363.
    $\dagger$ Hakluyt Morga, Append. 360.

[^145]:    * According to the Mineral Review, Madrid, 1866, xvii. 244, the coal from the mountain of Alpac6, in the district of Naga, in Cebu, is dry, pure, almost free of sulphur pyrites, burns easily, and with a strong flame. In the experiments made at the laboratory of the School of Mines in Madrid it yielded four per cent. of ashes, and a heating power of 4,825 caloria; $i$. e., by the burning of one part by weight 4,825 parts by weight of water were heated to $1^{\circ} \mathrm{C}$. Good pit-coal gives 6,000 cal. The first coal pits in Cebu were excavated in the Massanga valley; but the works were discontinued in 1859, after considerable outlay had been made on them. Four strata of considerable thickness were subsequently discovered in the valley of Alpacó and in the mountain of Oling, in Naga.
    "The coal of Cebu is acknowledged to be better than that of Australia and Labuan, but has not sufficient heating power to be used, unmixed with other coal, on long sea voyages."
    According to the Catalogue of the Products of the Philippines(Manila, 1866), the coal strata of Cebu have, at many places in the mountain range which runs from north to south across the whole of the island, an average thickness of two miles. The coal is of middling quality, and is burnt in the Government steam works after being mixed with Cardiff coal. The price in Cebu is on the average six dollars per ton.
    $\dagger$ English Consular Report, 217.

[^146]:    * The man credited with the development of the sugar industry through machinery. A monument has been erected to his memory.-T.

[^147]:    * In Jaro the leases have increased threefold in six years: and cattle which were worth $\$ 10$ in 1860, fetched $\$ 25$ in 1866 . Plots of land on the "Ria," in Hloilo, have risen from $\$ 100$ to $\$ 500$, and even as high as $\$ 800$. (Diario, February 1867). These results are to be ascribed to the sugar trade, which, through free exportation, has become extremely lucrative.

[^148]:    * In 1855 Iloilo took altogether from Negros 3,000 piculs out of 11,700 ; in 1860 as much as 90.000 piculs; in 1863, 176,000 piculs (in twenty-seven foreign ships); in 1866, 250,000 piculs; in 1871, 312,379 piculs from both islands.

[^149]:    * The sugar intended for the English market cost in Manila, in the years 1868 and 1869 , from $£ 15$ to $£ 16$ per ton, and fetched in London about $£ 20$ per ton. The best refined sugar prepared in Manila for Australia was, on account of the higher duty, worth only $£ 3$ per ton more in London; but, being $£ 5$ dearer than the inferior quality, it commanded a premium of $£ 2$. Manila exports the sugar chiefly from Pangasinan, Pampanga, and Laguna.-(From private information.)

[^150]:    * The Islands of the East Indian Archipelago, 1868, p. 340.
    $\dagger$ Exhibition Catalogue; section, French Colonies, 1867, p. 80.
    $\ddagger$ Report of the Commissioners, Exhibition 1867, iv. 102. The South American Indians have for a long time past employed the banana fiber in the manufacture of clothing material;-(The Technologist, September, 1865, p. 89, from unauthenticated sources,) and in Loo Choo the banana fiber is the only kind in use (Faits Commerciaux, No. 1514. p. 36).

[^151]:    * Abacá not readily taking tar is, consequently, only used for running, and not standing, rigging.

[^152]:    * A plant in full growth produces annually 3 :wt. bandala to the acre, whereas from an acre of flax not more than from 2 to 4 cwt . of pure flax, and from 2 to 8 cw . seed can be obtained.

[^153]:    * As Dr. Wittmack communicated to me, only fiber or seed can be obtained from hemp, as when the hemp is ripe, i.e. run to seed, the fiber becomes then both brittle and coarse. When cultivating flax very often both seeds and fiber are used, but then they both are of inferior quality.

[^154]:    * Flora de Filipinas.

[^155]:    * In 1868, £100 per ton was paid for lupis, although only imported in small quantities-about five tons per annum-and principally used at one time in France in the manufacture of a particular kind of underclothing. The fashion soon, however, died out. Quitol, a less valuable sort of lupis, could be sold at $£ 75$ per ton.

[^156]:    * Inflexibility is peculiar to all fibers of the Monocotyledons, because they consist of coarsely rounded cells. On the other hand, the true bast fibers-the Dicotyledons (flax, for instance)-are the reverse.

[^157]:    * Through the agricultural system, also, the mestizos and natives secure the work of their countrymen by making these advances, and renewing them before the old ones are paid off. These thoughtless people consequently fall deeper and deeper into debt, and become virtually the peons of their creditors, it being impossible for them to escape in any way from their position. The "part-share contract" is much the same in its operative effects, the landlord having to supply the farmer with agricultural implements and draught-cattle, and often in addition supplying the whole family with clothing and provisions; and, on division of the earnings, the farmer is unable to cover his debt. It is true the Filipinos are responsible legally to the extent of five dollars only, a special enactment pro-
    hibiting these usurious bargains. As a matter of fact, however, they are genhibiting these usurious bargains. As a matter of fact, however, they are gen-
    erally practised.

[^158]:    * This feeling of jealousy had very nearly the effect of closing the new harbors immediately after they were opened.

[^159]:    * Rapport Consulaire Belge, XIV., 68.

[^160]:    * In the Agricultural Report of 1869, p. 232, another fiber was highly mentioned, belonging to a plant very closely related to sisal (Bromelia Sylvestris), perhaps even a variety of the same. The Mexican name, jxtle, is possibly derived from the fact of their curiously flattened, spike-edged leaves, resembling the dentated knives formed from volcanic stone (obsidian) possessed by the Aztecs and termed by them iztli.

[^161]:    * The banana trees are well known to be among the most valuable of plants to mankind. In their unripe state they afford starch-flour; and when mature, they supply an agreeable and nutritious fruit, which, although partaken of freely, will produce neither unpleasantness nor any injurious after-effects. One of the best of the edible species bears fruit as early as five or six months after being planted, suckers in the meantime constantly sprouting from the roots, so that continual fruit-bearing is going on, the labor of the growers merely being confined to the occasional cutting down of the old plants and to gathering in the fruit. The broad leaves afford to other young plants the shade which is so requisite in tropical countries, and are employed in many useful ways about the house. Many a hut, too, has to thank the banana trees surrounding it from the conflagration, which, generally speaking, lays the village in ashes. I should here like to make an observation upon a mistake which has spread rather widely. In Bishop Pallegoix's excellent work, Description du Royaume Thai ou Siam, I. 144, he says: "L'arbre a vernis qui est une espece de bananier, et que les Siamois appellent 'rak,' fournit ce beau vernis qu'on admire dans les petits meubles qu'on apporte de Chine." When I was in Bangkok, I called the attention of the amiable whitehaired, and at that time nearly nonogenarian, bishop to this curious statement. Shaking his head, he said he could not have written it. I showed him the very passage. "Ma foi, j'ai dit une betise; j'en ai dit bien d'autres." whispered he in my ear, holding up his hand as if afraid somebody might overhear him.

[^162]:    * In 1862, English took from Spain 156 tons; 1863, 18,074 tons; 1866, 66,913 tons; $1868,95,000$ tons; and the import of rags fell from 24,000 tons in 1866 to 17,000 tons in 1668 . In Algiers a large quantity of sparto (Alfa) grows but the cost of transport is too expensive to admit of sending it to France.

[^163]:    * The British Consul estimates the receipts from this monopoly for the year 1866-7 at $\$ 8,418,939$, after an expenditure of $\$ 4,519,866$; thus leaving a clear profit of $\$ 3,899,073$. In the colonial budget for 1867 the profit on tobacco was estimated at $\$ 2,627,976$, while the total expenditure of the colony, after deduction of the expenses occasioned by the tobacco management, was set down at \$7,033,576.

    According to the official tables of the chief of the Administration in Manila, 1871, the total annual revenue derived from the tobacco management between the years 1865 and 1869 amounted, on an average, to $\$ 5,367,262$. By reason of proper accounts bsing wanting an accurate estimate of the expenditure cannot be delivered; but it would be at least $\$ 4,000,000$, so that a profit of only $\$ 1,367$,-
    262 remains. 262 remains.

[^164]:    * Instruccion general para la Direccion, Administracion, y Intervencion de las Rentas Estancadas, 1849.
    $\dagger$ Memoria sobre el Desestanco del Tabaco en las Islas Filipinas. Don J. S. Agius, Binondo (Manila), 1871.

[^165]:    * The tobacco in China appears to have come from the Philippines. "The memoranda discovered in Wang-tao leave no possible doubt that it was first introduced into South China from the Philippine Islands in the sixteenth and seventeenth century, most probably by way of Japan."-(Notes and Queries, China and Japan, May 31st, 1867.)

    From Schlegel, in Batavia, it was brought by the Portuguese into Japan somewhere between the years 1573 and 1591 , and spread itself so rapidly in China that we find even as early as 1638 , that the sale of it was forbidden under penalty of beheading.

    According to Notes and Queries, China and Japan, July 31, 1867, the use of tobacco was quite common in the "Manchu" army. In a Chinese work, Natural History Miscellany, it is written: "Yen t'sao (literally smoke plant) was introduced into Fukien about the end of the Wan-li Government, between 1573 and 1620, and was known as Tan-pa-ku (from Tombaku)."

[^166]:    * West Cuba produces the best tobacco, the famous Vuelta abajo, 400,000 cwt . at from $\$ 14.28$ to $\$ 99,96$ the cwt.; picked sorts being valued at from $\$ 571.20$ to $\$ 714.00$ per cwt. Cuba produces $640,000 \mathrm{cwt}$. The cigars exhibited in the Paris Exhibition of 1867 were worth from $\$ 24.99$ to $\$ 406.98$ per thousand. The number of cigars annually exported is estimated at about $5,000,000$. (Jury Report, v., 375.) In Jenidje-Karasu (Salonica) 17,500 cwt. are obtained annually, of which $2,500 \mathrm{cwt}$. are of the first quality; the cost is $\$ 1.75$ the oka (about .75 per lb .). Picked sorts are worth 15 s . per lb ., and even more.-Saladin Bey, La Turquie a l'Exposition, p. 91.

[^167]:    * In Cuba the tobacco industry is entirely free. The extraordinary increase of the trade and the improved quality of the tobacco are, in great measure, to be ascribed to the honest competition existing between the factories, who receive no other protection from the Government than a recognition of their operations. -(Jury Report, 1867, v., 375.)

[^168]:    * Basco also introduced the cultivation of silk, and had $4,500,000$ mulberry trees planted in the Camarines. This industry, immediately upon his retirement, was allowed to fall into decay.
    $\dagger$ According to La Pérouse, this measure occasioned a revolt in all parts of the island, which had to be suppressed by force of arms. In the same manner the monopoly introduced into America at the same time brought about a dangerous insurrection, and was the means of reducing Venezuela to a state of extreme poverty, and, in fact, was the cause of the subsequent downfall of the colony.

[^169]:    * A fardo (pack) contains 40 manos (bundles); 1 mano $=10$ manojitos, 1 manojito $=10$ leaves. Regulations, \& 7.

[^170]:    * On an average $407,500,000$ cigars and $1,041,000 \mathrm{lbs}$. raw tobacco are exported annually, the weight of which together is about $56,000 \mathrm{cwt}$. after deducting what is given away in the form of gratuities.

[^171]:    * The poor peasant being brought into this situation finds it very hard to maintain his family. He is compelled to borrow money at an exorbitant rate of interest, and, consequently, sinks deeper and deeper into debt and misery. The dread of fines or bodily punishment, rather than the prospect of high prices, is the chief method by which the supplies can be kept up.-(Report of the English Consul.)

[^172]:    * From December 1853 to November 1854 the colony possessed four captainsgeneral (two effective and two provisional). In 1850 a new nominee, Oidor (member of the Supreme Court of Judicature) who with his family voyaged to Manila by the Cape; found, upon his arrival, his successor already in office, the latter having travelled by way of Suez. Such circumstances need not occasion surprise when it is remembered how such operations are repeated in Spain itself.

    According to an essay in the Revue Nationale, April, 1867, Spain has had, from 1834 to 1862, i.e. since the accession of Isabella, 4 Constitutions, 28 Parliaments, 47 Chief Ministers, 529 Cabinet Ministers, and 68 Ministers of the Interior; of which last class of officials each, on an average, was in power only six months. For ten years past the Minister of Finance has not remained in office longer than two months; and since that time, particularly since 1868, the changes have followed one another with still greater rapidity.

[^173]:    * The reason of this premiun on silver was, that the Chinese bought up all the Spanish and Mexican dollars, in order to send them to China, where they are worth more than other dollars, being known from the voyage of the galleon thither in olden times, and being current in the inland provinces. (The highest price there can be obtained for a Carlos III.)

    A mint erected in Manila since that time, which at least supports itself, if the govenment has derived no other advantage from it, has removed this difficulty. The Chinese are accustomed to bring gold and silver as currency, mixed also with foreign coinage, to Manila for the purpose of buying the produce of the country; and all this the native merchants had recoined. At first only silver ounces were usually obtainable in Manila, gold ounces very rarely. This occasioned such a steady importation that the conditions were completely reversed. In the Insular Treasury the gold and silver dollar are always reckoned at the same value.

[^174]:    * The Chinese were generally known in the Philippines as "Sangleys"; according to Professor Schott, "sang-lui (in the south szang-loi, also senng-loi) mercatorum ordo.". 'Sang'' is more specially applied to the travelling traders, in opposition to "ku," tabernarii.
    $\dagger$......"They are a wicked and vicious people, and, owing to their numbers, and to their being such large eaters, they consume the provisions and render them dear ......It is true the town cannot exist without the Chinese, as they are the workers in all the trades and business, and very industrious, and work for small wages; but for that very reason a lesser number of them would be sufficient."Morga, p. 349.

[^175]:    * "Recopilacion," Lib. iv., Tit. xviii., ley. 1.

[^176]:    * "Informe," I., iii., 73.
    $\dagger$ The Chinese were not permitted to live in the town, but in a district specially set apart for them.
    $\ddagger$ Velarde, 274.

[^177]:    * See following chapter.
    $\dagger$ Zuñiga, xvi.

[^178]:    * No single people in Europe can in any way compare with the inhabitants of California, which, in the early years of its existence, was composed only of men in the prime of their strength and activity, without aged people, without women, and without children. Their activity, in a country where everything had to be provided (no civilised neighbors living within some hundred miles or so), and where all provisions were to be obtained only at a fabulous cost, was stimulated to the highest pitch. Without here going into the particulars of their history, it need only be remembered that they founded, in twenty-five years, a powerful State, the fame of which has spread all over the world, and around whose borders young territories have sprung into existence and flourished vigorously; two of them indeed having attained to the condition of independent States. After the Californian gold-diggers had changed the configuration of the ground of entire provinces by having, with Titanic might, deposited masses of earth into the sea until they expanded into hilly districts, so as to obtain therefrom, with the aid of ingenious machinery, the smallest particle of gold which was contained therein, they have astonished the world in their capacity of agriculturalists, whose produce is sent even to the most distant markets, and everywhere takes the first rank without dispute. Such mighty results have been achieved by a people whose total number scarcely, indeed, exceeds 500.000; and therefore, perhaps, they may not find it an easy matter to withstand the competition of the Chinese.

[^179]:    * The rails, if laid in one continuous line, would measure about 103,000 feet, the weight of them being $20,000 \mathrm{cwt}$. Eight Chinamen were engaged in the work, relieving one another by fours. These men were chosen to perform this feat on account of their particular activity, out of $\mathbf{1 0 , 0 0 0}$.
    (The translator of the 1875 London edition notes: "This statement is incorrect, so far as the fact of the feat being accomplished by Chinese is concerned. Eight Europeans were engaged in this extraordinary piece of work. During the rejoicings which took place in Sacramento upon the opening of the line, these men were paraded in a van, with the account of their splendid achievement painted in large letters on the outside. Certainly not one of them was a Chinaman."-C.

[^180]:    * Magellan fell on April 27, struck by a poisoned arrow, on the small island of Mactan, lying opposite the harbor of Cebu. His lieutenant, Sebastian de Elcano, doubled the Cape of Good Hope, and on September 6, 1522, brought back one of the five ships with which Magellan set sail from St. Lucar in 1519, and eighteen men, with Pigafetta, to the same harbor, and thus accomplished the first voyage round the world in three years and fourteen days.
    $\dagger 1565$ is the date for what is now the Philippines.-C.

[^181]:    * Villalobos gave this name to one of the Southern islands and Legaspi extended it to the entire archipelago.-C.
    $\dagger$ "According to recent authors they were also named after Villalobos in 1543. -Morga, p. 5.

[^182]:    * According to Morga (p. 140) there was neither king nor governor, but in each island and province were numerous persons of rank, whose dependants and subjects were divided into quarters (barrios) and families. These petty rulers had to render homage by means of tributes from the crops (buiz), also by socage or personal service: but their relations were exempted from such services as were rendered by the plebeians (timauas). The dignities of the chieftains were hereditary, their honors descended also to their wives. If a chief particularly distinguished himself, then the rest followed him; but the Government retained to themselves the administration of the Barangays through their own particular officials. Concerning the system of slavery under the native rule, Morga says (p. 41, abbreviated), "The natives of these islands are divided into three classes - nobles, timauas or plebeians, and the slaves of the former. There are different sorts of slaves: some in complete slavery (Saguiguilires), who work in the house, as also their children. Others live with their families in their own houses and render service to their lords at sowing and harvest-time, also as boatmen, or in the construction of houses, etc. They must attend as often as they are required, and give their services without pay or recompense of any kind. They are called Namamahayes; and their duties and obligations descend to their children and successors. Of these Saguiguilires and Namamahayes a few are full slaves, some half slaves, and others quarter slaves.

    When, for instance, the mother or father was free, the only son would be half free, half slave. Supposing there were several sons, the first one inherits the father's position, the second that of the mother. When the number is unequal the last one is half free and half slave; and the descendants born of such half slaves and those who are free are quarter slaves. The half slaves, whether saouiguilires or namamahayes, serve their lords equally every month in turns. Half and quarter slaves can, by reason of their being partially free, compel their lord to give them their freedom at a previously determined and unfluctuating price: but full slaves do not possess this right., A namamahaye is worth half as much as a sajuiguilire. All slaves are natives."

    Again, at p. 143, he writes:-"A slave who has children by her lord is thereby freed together with her children. The latter, however, are not considered well born, and cannot inherit property; nor do the rights of nobility, supposing in such a case the father to possess any, descend to them."

[^183]:    * He made the Filipinos of his encomienda of Vigan his heirs, and has ever been held in grateful memory.-C.

[^184]:    * Grav. 30.
    $\dagger$ Chamisso ("Observations and Views," p. 72), thanks to the translator of Zuñiga, knew that he was in duty bound to dwell at some length over this excellent history; though Zuñiga's narrative is always, comparatively speaking, short and to the point. The judiciously abbreviated English translation, however, contains many miscomprehensions.

[^185]:    * Principally by hiring the assassination of the gifted native leader, Silang.-C.

[^186]:    * Danger to Europeans, "Massacre of all white people," was a frequent Spanish allegation in political disturbances, but the only proof ever given (the 9th degree Masonic apron stupidly attributed to the Katipunan in 1896) was absurd and irrelevant.-C.

[^187]:    * Professor Jagor here follows the report sent out by the authorities. There seems better ground for believing the affair to have been merely a military mutiny over restricting rights which was made a pretext for getting rid of those whose liberal views were objectionable to the government.- $C$.

[^188]:    * I take the liberty, here, of citing an instance of this. In 1861, when I found myself on the West Coast of Mexico, a dozen backwoods families determined upon settling in Sonora (forming an oasis in the desert); a plan which was frustrated by the invasion at that time of the European powers.Many native farmers awaited the arrival of these immigrants in order to settle under their protection. The value of land in consequence of the announcement of the project rose very considerably.

[^189]:    Whatever may have been the causes of this evident backwardness, from the period of the establishment of the Philippine Company in these Islands, and in consequence of the exertions of some of the directors to promote the cultivation of indigo, at that time very little known, the natives have slowly, though gradually, been reconciled to it; and discovering it to be one of the most advantageous branches of industry, although accompanied with some labor and exposed to the influence of droughts and excessive heats, as well as to the risks attendant on the extraordinary anticipation of the rainy seasons, have of late years paid more attention to it. The quintal of indigo of the first class costs the planter from $\$ 35$ to $\$ 40$ at most; and in the market of Manila it has been sold from $\$ 60$ to $\$ 130$, according to the quality and the greater or lesser demand for the article at the season. As, however, everything in this colony moves within a small circle, it is not possible to obtain large quantities for exportation; not only because of the risk in advancing the Indian sums of money on account of his crop, but also owing to the annual surplus seldom exceeding from two to two thousand five hundred distributed in many hands, and collected by numerous agents, equally interested in making up their return-cargoes.

    The cultivation of the sugar-cane is more or less extended to all the provinces of these Islands, owing to its consumption among the natives being both great and general; but those of La Pampanga and Pangasinan are more particularly devoted to it. These two provinces alone annually produce about 550,000 arrobas $(13,750,000$ lbs.) of which one-third is usually exported in Chinese and other foreign vessels. In extraordinary seasons, the amount exported greatly exceeds the quantity above stated, as, for example, happened in the monsoon of 1796 , when the planters came down to the port of Manila, and by contract exported upwards of nine millions weight, of the first and second qualities. The price of this article has experienced many variations of late years; but the medium may be estimated at $\$ 6$ for one hundred twenty-five pounds of the first quality, and $\$ 5$ for the second.

    The superior quality of the sugar of the Philippines is acknowledged, when compared to that produced in the Island of Java, China, or Bengal; notwithstanding in the latter countries it may naturally be concluded that greater pains and care are bestowed on its manufacture. The pressure of the cane in the Philippine Islands is performed by means of two coarse stone cylinders, placed on the ground, and moved in opposite directions by the slow and

    Increasing culture.
    
    
    $\square$
    $\square$
    
    
     Manufacture.

[^190]:    Need of experienced cultivators.

[^191]:    

[^192]:    Coco-wine.

[^193]:    "When is it we shall have had enough of treaties with these Moros, for have we not before us the experience of more than one hundred years, during which period of time, they have not kept a single article in any way burdensome to, or binding on, themselves? They will never observe the conditions of peace, because their property consists in the possession of slaves, and with them they traffic, the same as other nations do with money. Sooner will the hawk release his prey from his talons than they will put an end to their piracies. The cause of their being still unfaithful to Spain arises out of this matter having been taken up by fits and starts, and not in the serious manner it ought to have been done. To make war on them, in an effectual manner, fleets must not be employed, but

[^194]:    * It is called so in consequence of the island being nearly divided in the parallel of $14^{\circ} \mathrm{N}$., by two bays.

[^195]:    * Since my return home, at the desire of that disting uished agriculturist, Colonel Austin, of South Carolina, I have sent for some samples of the different kinds, and under his care it will no doubt be well treated.

[^196]:    * On my arrival at Singapore, this circumstance was investigated by a court of inquiry. The result showed that Mr. Knox had no knowledge of the Vincennes having been seen; for the officer of the watch had not reported to him the fact.

[^197]:    Visiting the

[^198]:    * Chewing the betelnut and pepper-leaf also produces this effect, and is carried to a great extent among these islanders.
    $\dagger$ The Sultan, on the visit of one of our merchant-vessels, had informed the supercargo that he wished to encourage our trade, and to see the vessels of the United States coming to his port.

[^199]:    * This name is derived from the large bay that makes in on the south side of the island of Mindanao, and on which a set of freebooters reside.

[^200]:    Suppression of pirates.

[^201]:    * From the History of a Voyage of the China Sea, by John White.

[^202]:    * P. 115.
    $\dagger$ Pp. 116-119

[^203]:    * P. 121.

[^204]:    * Pp. 125-128.

[^205]:    * Pp. 137-138.

[^206]:    * Pp. 143-144.
    $\dagger$ Pp. 144-146.

